DOCUMENT RESUME

ED 246 833 HE 017 750

TITLE	Involvement in Learning: Realizing the Potential of American Higher Education. Final Report of the Study Group on the Conditions of Excellence in American Higher Education.
INSTITUTION	National Inst. of Education (ED), Washington, DC.
PUB DATE	Oct 84
NOTE	127p.; For background papers, see ED 239 701 and HE 017 751-754.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 065-000-00213-2.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Academic Standards; Change Strategies; *College Curriculum; College Faculty; College Instruction; College Role; College Students; Educational Assessment; *Educational Objectives; Educational Quality; *Higher Education; Improvement Programs; Liberal Arts; Student College Relationship; Student Evaluation; *Student Motivation; Student Participation; Student Teacher Relationship; *Undergraduate Study
IDENTIFIERS	Blue Ribbon Commissions; *Excellence In Education

ABSTRACT

Ways to improve undergraduate education are suggested, based on the work of the Study Group on the Conditions of Excellence in American Higher Education. After considering shared values and long-term goals for American higher education, attention is directed to both the achievements and problems of colleges. Major themes are that student involvement and motivation are the keys to learning, that learning is most effectively conducted as a joint enterprise, and that higher learning can promote intelligent action in society and the economy. Recommendations are offered about the goals of undergraduate education and about practical steps for achieving them, including seven recommendations for increasing student involvement, eight recommendations for realizing high expectations, and four recommendations for assessment and providing feedback. Also included are two recommendations to graduate schools, four recommendations to external agencies (state and system-level officials, accrediting agencies, state legislatures, and boards of trustees), and one recommendation to the research community. Advice to students concerning student involvement in learning, expectations, and role in assessment of higher education is also provided. Appendix A is a summary of the Interim Report of the Study Group. Appendix B is a list of commissioned papers and staff analyses. Appendix C contains acknowledgments. Appendix D consists of biographies of study group members and staff. Separate but related items appended are: (1) the Department of Education news release concerning the report (including a "Fact Sheet"); (2) the statements made by T. H. Bell releasing the report; and (3) an eight-page executive summary of the report. (SW)

ED246833

Involvement In Learning:

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

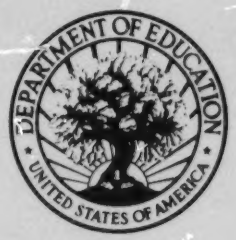
Study Group on the Conditions of Excellence in American Higher Education

Sponsored by the National Institute of Education

HE 017 750

Involvement In Learning:

Realizing the Potential of American Higher Education



Final Report of the
Study Group on the Conditions of
Excellence in American Higher Education

Sponsored by the National Institute of Education

Presented to the Secretary of Education and
The Director of the National Institute of Education

October 1984

Contents

LETTER OF TRANSMITTAL v
FOREWORD ix
A MATTER OF TRUST 1
THE SUCCESS STORY AND THE WARNING SIGNALS 5
CONDITIONS OF EXCELLENCE IN UNDERGRADUATE EDUCATION 15
RECOMMENDATIONS FOR INCREASING STUDENT INVOLVEMENT 23
RECOMMENDATIONS FOR REALIZING HIGH EXPECTATIONS 37
RECOMMENDATIONS FOR ASSESSMENT AND PROVIDING FEEDBACK 53
IMPLICATIONS OF THE CONDITIONS OF EXCELLENCE 63
- Recommendations to Graduate Schools 63
- Recommendations to External Agencies 66
- Recommendations to the Research Community 72

TO STUDENTS 77
APPENDIXES
- A. SUMMARY OF THE INTERIM REPORT OF THE STUDY GROUP 83
- B. LIST OF COMMISSIONED PAPERS AND STAFF ANALYSES 89
- C. ACKNOWLEDGMENTS 91
- D. BIOGRAPHIES OF STUDY GROUP MEMBERS AND STAFF 95

Letter of Transmittal

The Honorable T. H. Bell
Secretary of Education
U.S. Department of Education
Washington, D.C. 20208

October 15, 1984

Dr. Manuel Justiz
Director
National Institute of Education
1200 19th St., N.W.
Washington, D.C. 20208

Dear Secretary Bell and Director Justiz:

The Study Group on the Conditions of Excellence in American Higher Education herewith submits its final report, which is directed toward the improvement of undergraduate education in American colleges, community colleges, and universities.

Our study group was appointed by Dr. Justiz in October, 1983 to suggest ways in which policy analysis, research, and recommendations for improvement in higher education could be developed and implemented. In our first meeting, we decided that we could offer effective suggestions only if we developed a basic conception of excellence in higher education that was centered on student learning. We also agreed that we needed to consider what America can realistically expect from its colleges and universities, the role of these institutions in student learning and development, and the possible alterations in educational practice that would be the most sensible.

Since last October, we have functioned as a seminar, studying and assessing reports, archives, and background materials of various recent commissions on American education, such as the National Commission on Excellence in Education. We also commissioned a small number of scholarly papers and staff studies to provide some guidance for our deliberations, and we consulted with knowledgeable researchers and educators concerning the issues we were addressing.

We were free to examine all aspects of higher education policy and practice, but our charge was focused in two ways:

- Our principal concern was to be with undergraduate education. We were asked to consider graduate education only to the extent that it affects the quality of undergraduate programs.

- In deference to a Congressionally chartered Commission on Student Financial Assistance, we were not to deal directly with student aid and related matters except as they directly affect student learning.

We believe that we have fulfilled our charge in the attached report.

- We focus on ways to improve undergraduate education, and we recommend improvements in the graduate training of prospective college and university faculty that we believe will benefit the quality of undergraduate programs. We offer most of our suggestions to administrators and faculty members in the Nation's community colleges, four-year colleges, and undergraduate programs in universities. But we hope that our theory of effective undergraduate education may be useful to educators involved in university professional schools, in trade and technical institutes, and in the education programs increasingly offered by business and industry, public agencies, and the military.

- In the following pages, we first offer our values and our long-term goals for American higher education. We next consider both the achievements and the problems in American higher education that prompt our concern with improvement. We then offer our analysis of the basic conditions of excellence in undergraduate education, and recommendations dealing with those conditions. Next, we discuss the implications of these recommendations for groups and individuals who affect undergraduate education—from external agencies and graduate schools to accrediting associations and the

research community. Lastly, we offer some suggestions to the most important group involved in higher education, undergraduate students.

We hope that this report will be a significant contribution to national discussion and action on improving quality in postsecondary education, and we wish to acknowledge here our appreciation for your support, for the participation of our two *ex officio* members and, in particular, the support of the National Institute of Education during this past year.

Yours truly,

Alexander W. Astin
University of California, Los Angeles

Zelda F. Gamson
University of Michigan

J. Herman Blake
Tougaloo College

Harold L. Hodgkinson
Institute for Educational Leadership

Howard R. Bowen
Claremont Graduate School

Barbara Lee
Rutgers University

Kenneth P. Mortimer
Chair
The Pennsylvania State University

Foreword

When the report of the National Commission on Excellence in Education was released in the spring of 1983, its recommendations stimulated a tremendously positive period of self-examination and reform in American education, particularly at the elementary and secondary school levels. But the Commission's background work provided two other valuable services for all those who care deeply about education in the United States: first, it underscored the ways in which higher education influences the other levels of education; and secondly, it drew our attention to the need for using the knowledge base, the results of research, to inform our debates concerning improvement in education.

The theme of relationships among levels of education has been consistent in our public discussions. The more frequently we were asked whether the Commission's analysis could be extended to higher education, the more evident the call for an examination of American higher education became. Our aim in acting to meet this call was to be certain that any examination or recommendation for improvement of American higher education was informed by knowledge. More specifically, we wanted to know (1) how our current knowledge about higher education could be enhanced, and (2) how the findings of research could be utilized by students, faculty, deans, college presidents, trustees, legislators, and others in their improvement efforts.

To help us address these concerns and questions, Dr. Justiz created not a commission, but a "Study Group." A Study Group is a traditional form of advisory body used at The National Institute of Education, one that functions very

much like a seminar. It is a small group whose members are chosen not on the basis of whom they represent but on the evidence of what they know.

In this case, Dr. Justiz selected seven individuals who had spent their lives in both the practice and study of higher education. The Study Group comprised a multidisciplinary body, with academic backgrounds in economics, psychology, public administration, law, and sociology, and with both the penchant and skill for integrating vast amounts of knowledge from such topics as the governance, economy, and management of higher education, college curriculum and instruction, student development, and faculty careers. They had worked in and/or studied every sector of higher education—community colleges, liberal arts colleges, state colleges, research universities, and education programs of corporations and public agencies. We trusted that a group with this comprehensive background would draw on both the shared wisdom of their experience and the research literature on higher education to address our two principal concerns.

The report we are privileged to introduce has more than fulfilled that trust. It is an exemplary demonstration of how to utilize knowledge and research in efforts to improve education—a linkage not often found. That it became what it was designed to anticipate—an analysis of the state of American higher education with recommendations for improvement—speaks to the deep commitments of the members of the Study Group to excellence in education. As Dr. Elmendorf observed and participated in the deliberations of this group, a group intensely involved in debating the evidence and collectively writing its report, he understood and more deeply appreciated the phrase, "a community of learners."

Indeed, the very methods of the Study Group's work exemplify the major themes of this report: that student involvement is the key to learning, that learning is most effectively conducted as a joint enterprise, and that higher learning pays its greatest dividends when it serves to inform intelligent action in our society and economy. We hope the

reader will come to share these ideas, and will join in the process of deliberating the recommendations of this report in the near future.

Secretary of Education T. H. Bell has provided us the opportunity to share the fruits of this effort with all who are concerned about American higher education, and we are particularly grateful for his leadership.

Manuel J. Justiz
Director, National
Institute of Education

Edward M. Elmendorf
Assistant Secretary for
Postsecondary Education

A Matter of Trust

The Nation has been conducting a paradoxical debate on the quality of schooling. While all sides have assumed that we must become a society in which learning never ends, the debate always seems to stop at the border of high school graduation, as if learning itself ended at that point.

But more than half of our students voluntarily cross that border, trusting that what awaits them on the other side is worthy. What they will find is a system of higher education that is by far the largest, most complex, and most advanced in the world. The Nation has entrusted this system to extend both the franchise of learning and the frontiers of the universe itself. But our students will find that this great national resource has not realized its full potential.

Nor has the potential of higher education for improving the lives of the Nation's citizens been recognized in our national debate. As long as the spotlight of the debate focuses only on elementary and secondary education, we limit our ability to become a learning society. In this report, we turn the spotlight on higher education, the level of the system from which the other levels so often take their cues. We seek ways to renew the trust our students and our Nation place in higher education, especially in the undergraduate years. In doing so, we join others who are worried about the state of undergraduate education, in particular, about the status of first- and second-year students and the erosion of liberal learning.

As we write, signs of interest in undergraduate education are beginning to reappear. College faculty are once again beginning to ask what every educated person should

know and therefore what their students should learn. They are talking with one another across disciplinary boundaries about their mutual interests, and are experimenting with new courses and programs. So this report, itself the culmination of the work of many commissions and conferences on undergraduate education, may arrive at a propitious time.

Shared Values

We write from a set of shared values about higher education in the United States. These values guided our discussions and shaped our analyses, conclusions, and recommendations. They form the cornerstones of the renewal we hope will result from our efforts, the goals we trust our readers will share with us:

> The United States must become a nation of educated people. Its citizens should be knowledgeable, creative, and open to ideas. Above all, they should learn how to learn so they can pursue knowledge throughout their lives and assist their children in the same quest.
>
> To attain this goal, higher learning in America should be broadened and deepened so as to provide increased opportunities for intellectual, cultural, and personal growth of all our citizens.
>
> Since many Americans are currently undereducated in relation to their potential, access to higher education should be extended to an ever-increasing proportion of the population, regardless of age. At the same time, the dropout rate of college students needs to be reduced. American society must use all of the means at its disposal to avoid these wastes of human potential and to engage every willing student in continued learning.

But greater access to education will be meaningless if colleges, community colleges, and universities do not offer high quality programs to their students. True equity requires that *all* Americans have access to *quality* higher education—to programs that demand college-level learning, that provide meaningful contact between faculty and students, and that serve as guides for intelligent action in the world beyond the campus.

To assure excellence, our colleges, community colleges, and universities should establish and maintain high standards of student and institutional performance. The results (or "outcomes") of the education offered by these institutions must be measured against their clearly and publicly articulated standards of performance.

Since excellence can be attained in diverse educational contexts, diversity in the missions of our colleges, in the specific means by which quality education is achieved, and in the composition of student, faculty, and administrative bodies should be preserved. We also believe that diversity should never serve as a means of limiting opportunities or lowering expectations.

In all of their efforts, colleges, community colleges, and universities should promote excellence without extravagance. They must shepherd their limited resources for greatest effectiveness and conduct their programs within reasonable costs. To seek excellence without regard to cost would be as irresponsible as looking at costs without reference to potential benefits.

Guided by these values and goals, this report makes recommendations for improving the quality of undergraduate education in order to enhance learning and personal development for the greatest possible number of students of all ages. It describes what we know from research but often fail to practice in our institutions. And it proposes specific steps for

454-737 O - 84 - 2

overcoming the barriers that prevent us from realizing the full potential of higher education in American society.

The Success Story and The Warning Signals

The Scope and Impact of Higher Education

Higher education in the United States is an enterprise of vast scope and diversity. Our colleges, community colleges, and universities enroll more than 12 million students, employ nearly 2 million workers, and account for 3 percent of the Gross National Product.

Three in five of all American high school graduates now enroll in college. Indeed, the United States has outdistanced all other industrialized nations in the proportion of its young people who participate in higher education. Equally important is the diversity of the 12 million students:

- More than half of all undergraduates are women.
- One out of every six is a member of a minority group.
- Two out of every five are over the age of 25.
- Fewer than three in five are attending college full time.

Rather than serving only a few, undergraduate education today serves the mass. The college degree has become the basic credential for an ever-growing number of occupations as well as a necessary criterion for leadership in virtually all walks of life.

As American society has demanded a more highly educated labor force, higher education has become not merely a preserver and transmitter of culture but an integral part of our economic progress and national well-being. To serve that

role, it has taken on numerous functions: research, vocational training, graduate and professional education, adult basic education and remediation, continuing education, and the provision of intellectual stimulation and cultural events for the general public. In addition, many of our academic institutions provide specialized public services such as agricultural extension, public policy analysis, and pace-setting medical treatment. All of these institutions are influential in socializing youth, in identifying talent, and in encouraging creativity. In fact, we have come to expect that higher education will serve all of these functions and play all of these roles.

And those expectations have been largely fulfilled. Research over the past 30 years has demonstrated that higher education contributes significantly to students' cognitive, emotional, and moral development, to their economic productivity and effectiveness as consumers, and to their family life, leisure-time activities, and health. College alumni who participate in follow-up surveys consistently cite the enduring benefits of higher education in making them aware of different cultures and ways of life, in promoting their understanding of science and technology, and in developing their interpersonal skills.

It is not surprising, then, that numerous surveys show that Americans have very positive attitudes toward higher education. Nor is it surprising that for millions of people, higher education has become a significant aspect of the American dream.

Growth and Change

As a result of our expectations, attitudes, and dreams, American higher education has undergone a dramatic period of growth and change over the past few decades. Few institutions in our society could have been subjected to the pressures of such rapid expansion and still have contributed as much to individuals and to the Nation.

The factor of growth has been most obvious. Since 1950 alone, enrollment in higher education has increased almost 400 percent, while the number of institutions has increased by almost 60 percent to nearly 3,300—including over 600 two-year community colleges that have been created since 1960.

But the components of change have been equally significant:

- Educational practices and technologies have changed with the introduction of self-paced instruction, competency-based learning, cooperative education, learning contracts, computer-assisted instruction, interactive language laboratories, paperback books, and televised instruction that reaches previously isolated populations.

- The relationship between students and institutions has changed. Few colleges act *in loco parentis*; most institutions treat students as adults.

- Enrollment patterns have changed. One in three of our freshmen have delayed entry to college after high school, more than two in five undergraduates attend college part-time, and over half of the bachelor's degree recipients take more than the traditional four years to complete the degree.

- The relationships between colleges and their faculties have changed. Faculty participation in governance has increased in some ways and decreased in others; collective bargaining is now a fact of life on over 800 campuses; and the concept of faculty development has been extended beyond the traditional sabbatical to include assistance in improving teaching, internal research support, and programs for acquiring knowledge in new fields.

- The governance and organization of higher education

have changed. State governments have assumed a dominant role; multicampus state systems have been established; and more students are enrolled in programs offered by corporations, public agencies, and other noncollegiate organizations than attend colleges and universities. (Some of these programs lead to the bachelor's degree and thus compete with higher education.)

It has been apparent throughout this period of growth and change that the limits of what higher education can teach never cease expanding, whether in history or chemistry, nursing or engineering. We have learned that the extent to which our future citizens will understand the cultures of all nations and the sciences and technologies that support their own culture will be determined, finally, at no other level of education.

The Warning Signals

The strains of rapid expansion, followed by recent years of constricting resources and leveling enrollments, have taken their toll. The realities of student learning, curricular coherence, the quality of facilities, faculty morale, and academic standards no longer measure up to our expectations. These gaps between the ideal and the actual are serious warning signals. They point to both current and potential problems that must be recognized and addressed.

Student Achievement

- One out of eight highly able high school seniors does not choose to attend college.
- Only half of the students who start college with the intention of getting a bachelor's degree actually attain this goal.

- Student performance on 11 of 15 major Subject Area Tests of the Graduate Record Examinations declined between 1964 and 1982. The sharpest declines occurred in subjects requiring high verbal skills.

One cannot blame these trends entirely on the decline in the preparation of entering college students. Part of the problem is what happens to students *after* they matriculate in college. Knowledge about how to improve retention rates and overall student achievement is accessible, but evidently higher education is not using it fully.

One of the principal purposes of our recommendations is to suggest ways in which existing knowledge can be utilized to close the gap between expectations and performance implied by these trends.

Undergraduate Programs and Degrees

- Increasing numbers of undergraduates are majoring in narrow specialties. American colleges, community colleges, and universities now offer more than 1,100 different majors and programs, nearly half of them in occupational fields.

- The proportion of bachelor's degrees awarded in arts and sciences (as opposed to professional and vocational programs) fell from 49 percent in 1971 to 36 percent in 1982. The percentage of arts and sciences (or "general program") degrees awarded by community colleges (the degrees that are most likely to lead to transfer to four-year institutions) declined from 57 percent in 1970 to 37 percent in 1981, with a corresponding rise in occupational degrees.

- Students have abandoned some of the traditional arts and sciences fields in large numbers. Just since 1977, the proportion of entering freshmen intending to major in the physical sciences has declined by 13 percent—in the

humanities by 17 percent; in the social sciences by 19 percent; and in the biological sciences by fully 21 percent.

- Accreditation standards for undergraduate professional programs often stand as barriers to the broad understanding we associate with liberal learning. For example, the guidelines of one professional accrediting association confine one-half to two-thirds of a student's baccalaureate program to courses in two areas. Another association prescribes approximately 70 percent of a student's total program and confines that percentage wholly to two subject areas. And according to the standards of yet another association, the bachelor's degree program should involve as much as 80 percent of a student's work in the professional field.

Specialization may be a virtue for some students. But as ever more narrow programs are created, they become isolated from each other, and many students end up with fragmented and limited knowledge. While depth of study in any area has great value, the guidelines laid down by many professional accrediting bodies distort students' expectations and close off their future options. The result is that the college curriculum has become excessively vocational in its orientation, and the bachelor's degree has lost its potential to foster the shared values and knowledge that bind us together as a society.

To a large extent, our recommendations seek to reverse the trends implied by these indicators and to restore liberal education to its central role in undergraduate education.

Faculty

- College and university faculty have lost approximately 20 percent of their purchasing power in the past decade. Furthermore, because of market forces, faculty members in some departments are paid so much more than those in other departments that collegiality has become strained.

- The proportion of faculty who teach part-time increased from 23 percent in 1966 to 41 percent in 1980. The higher the proportion of part-time faculty, the more difficult it becomes to maintain collegiality, to assure continuity in the instructional program, and to preserve coherence in the curriculum.

- The proportion of entering college freshmen intending to pursue careers as college professors dropped from 1.0 percent in 1966 to 0.2 percent in 1982. This 89 percent decline bodes ill for the future of higher education.

Faculty are the core of the academic work force, and their status, morale, collegiality and commitment to their institutions are critical to student learning. When we allow support for such a critical component of the enterprise to erode to the point at which the profession itself has become less attractive to our brightest students, we are compromising the future of higher learning in America. And many of our current faculty feel "stuck" in their careers. They have lost the traditional mobility and vision that motivated so many professors to strive for excellence in teaching and research.

Our recommendations are designed to improve the institutional environment as a workplace for faculty, to renew their commitment to their institutions through new roles, and to restore the support necessary to keep the profession attractive.

The Condition of Institutions

- While enrollments have risen nearly 400 percent since 1950, the number of America's colleges and universities increased only 60 percent. This means that more and more students attend large institutions. Since 1970, the average headcount enrollment of all of these institutions has expanded by 25 percent. Unfortunately, the greater the size of institutions, the more complex and bureaucratic they tend to become, the fewer the opportunities

for each student to become intensely involved with intellectual life, and the less personal the contact between faculty and students.

- The physical plant and equipment of American colleges and universities are rapidly deteriorating. Even the most prestigious research universities carry millions of dollars in deferred maintenance on their books, and equipment budgets for state colleges and community colleges are inadequate for student learning.

- Virtually all institutions of higher education, public and private, are dependent on some form of enrollment-driven funding and hence tend to serve the changing whims of demand rather than student needs. Approximately 75 percent of the Education and General revenues in all public institutions, and 50 percent of those revenues in all private institutions, are dependent on enrollments and hence are vulnerable to enrollment decline.

The ability of our colleges, community colleges, and universities to offer a high quality education is considerably constrained by these developments. American society has been generous in providing financial assistance to students. But supporting students to attend institutions whose programs suffer from lack of adequate facilities, laboratories, and equipment serves neither the drive for quality nor the cause of equity. Indeed, a funding system based principally on enrollments sends a clear message to colleges that quantity is valued over quality.

Our recommendations to higher education administrators and external agencies are designed to improve the environment and resources for student learning and to counteract the temptation of colleges and departments toward generating the maximum number of student credit hours without regard to the quality of learning.

Requirements and Standards

- Fourteen out of 50 state university systems have recently raised their requirements and standards—but only for purposes of admission, not for purposes of graduation. Stiffening admission *requirements* in some areas, such as years of high school study in basic academic disciplines, may well have a beneficial influence on the preparation of entering college freshmen. But imposing higher admission *standards* in other areas—cutoff scores on standardized tests and grade point averages—is an inappropriate response to recommendations for more rigor in subject matter preparation.

- Most American colleges and universities award their degrees when students have accumulated a given number of credits distributed among liberal education courses, major requirements, and electives and have achieved a minimum grade point average. Credits are measures of time and performance, but they do not indicate the academic worth of course content. In too many instances, quality control in the assignment of credits to courses is problematic. For example, in some colleges students can earn the same number of credits for taking a course in family food management or automobile ownership as for taking a course in the history of the American city or neuropsychology.

- According to a 1978 survey of 208 colleges and universities that had engaged in institutional self-studies in preparation for accreditation visits, only one in three had either generated or examined data on student learning and growth; only 23 percent had examined students' knowledge in their major fields; and only 14 percent had looked at their students' mental development (e.g., their analytic, synthesizing, and problem-solving capacities).

In many ways, these warning signals about requirements and standards concern us the most. While grades and credits may be useful in reflecting the competence of students at the end of course, they do not necessarily reflect what students have actually learned and retained. These warning signals also indicate the tendency of colleges to control their "inputs," such as the characteristics of the students they *admit*, while paying insufficient attention to their "outputs"—in particular, the learning of the students they *graduate*. Very few institutions actually monitor the growth of their students from entry to exit.

The recommendations we offer are designed to strengthen college graduation standards and to focus attention on what students learn.

* * *

Increased access to higher education will mean little to millions of new students if the degrees they seek are weakened as credentials, whether by reduced standards or by overspecialization. Access will mean little to those students who survive inadequate schooling and poor community environments if we cannot take advantage of the impressive levels of determination and enthusiasm they bring with them to college. Access will mean little to the Nation at large if its academic institutions offer fragmented, vocational curricula.

The higher education system sets the tone for the whole of American education and determines the aspirations of students at all levels. Americans respect learned men and women who have mastered the highest reaches of knowledge. Thus, if American higher education settles for less than the best—if it allows the chase for academic credentials to supersede the pursuit of learning—all levels of education will suffer. As they try to consolidate their position after years of rapid growth and to serve an increasing diversity of students, America's colleges, community colleges, and universities run the risk of accepting definitions of quality that are inadequate for the future.

In the following discussion we set forth the essential ingredients of an approach to improving the quality of American undergraduate education. These ingredients require that greater attention be paid to student learning.

Conditions of Excellence in Undergraduate Education

Excellence in higher education has traditionally been judged in terms of institutional resources, using measures such as endowments and expenditures, the breadth and depth of curricular offerings, the intellectual attainments of faculty, the test scores of entering students, and selectivity in admissions. Both educators and the public at large have valued these institutional characteristics because they appear to facilitate educational growth. And, indeed, some of them, such as the depth of the curriculum and the adequacy of libraries and laboratories, have the potential to influence student learning in very direct ways.

But there are two significant problems with these measures: (1) they are all proxies for educational excellence, and (2) they are all inputs. None of them tells us what students actually learn and how much they grow as a result of higher education. None of them tells us anything about educational outcomes. As a result, we have no way of knowing how academic institutions actually perform.

However inadequate they may be, these measures continue to be employed. They encourage institutions to focus their energies on acquiring more resources, sometimes to the detriment of student learning and development.

Excellence in higher education, we believe, requires

1. That institutions of higher education produce *demonstrable improvements* in student knowledge, capacities, skills, and attitudes between entrance and graduation;

2. That these demonstrable improvements occur within *established, clearly expressed, and publicly announced and*

maintained standards of performance for awarding degrees based on societal and institutional definitions of college-level academic learning; and

3. That these improvements are achieved *efficiently*, that is, that they are cost-effective in the use of student and institutional resources of time, effort, and money.

Adequate measures of educational excellence must thus be couched in terms of *student outcomes*—principally such academic outcomes as knowledge, intellectual capacities, and skills. Outcomes also may include other dimensions of student growth, such as self-confidence, persistence, leadership, empathy, social responsibility, and understanding of cultural and intellectual differences.

Before offering specific recommendations as means to meet the requirements of excellence in higher education, we must emphasize that the advice we offer about standards of content is intentionally general. It is not our aim to dictate particular and highly detailed sets of knowledge, capacities, skills, or attitudes that students should develop in the course of their undergraduate education. We were not charged to define the "knowledge most worth having," and it would be inappropriate for us to do so. Nowhere do we mean to imply that every college graduate should have read a particular book, should be able to perform a particular experiment or apply a particular theory to a real life situation, or should have taken a particular course in foreign language, computer science, calculus, Shakespeare, contemporary civilization, macroeconomics, or whatever. Our reason is simple: the responsibility for defining specific standards of content and levels of student performance and college-level learning in undergraduate education must fall on academic institutions themselves, or those standards will have no credibility.

Thus, our recommendations are designed to assist college administrators and faculty members in fulfilling that responsibility—through their colleges or through learned societies, higher education organizations, or accreditation bodies.

Their leadership is absolutely necessary in setting standards and raising expectations.

Much is known about the conditions under which student learning and growth can be maximized and about the methods and benchmarks by which these changes can be measured, even though the extent to which any one student benefits from these conditions depends on many immeasurable factors. But our colleges, community colleges, and universities rarely seek and apply this knowledge in shaping their educational policies and practices. We contend that the quality of undergraduate education could be significantly improved if America's colleges and universities would apply existing knowledge about three critical conditions of excellence—(1) student involvement, (2) high expectations, and (3) assessment and feedback.

Student Involvement

The first of these three conditions—and perhaps the most important for purposes of improving undergraduate education—is *student involvement*. By involvement we mean how much time, energy, and effort students devote to the learning process. There is now a good deal of research evidence to suggest that the more time and effort students invest in the learning process and the more intensely they engage in their own education, the greater will be their growth and achievement, their satisfaction with their educational experiences, and their persistence in college, and the more likely they are to continue their learning.

Highly involved students demonstrate their commitment in a variety of ways: by devoting considerable energy to studying, by working at on-campus rather than off-campus jobs, by participating actively in student organizations, and by interacting frequently with faculty members and student peers. Conversely, uninvolved students may neglect studies, spend little time on campus, abstain from

extracurricular activities, have little contact with faculty members or other students, and otherwise participate little in institutional life.

The notion of student involvement resembles in certain respects the more familiar psychological concept of motivation. But it implies something more than just a psychological state: it connotes behavior, and behavior can be directly observed, measured, and assessed.

One of the most precious of educational resources is student time. Strategies to increase student involvement acknowledge that the time and energy of students are finite and that educators compete with other forces in the student's life, such as family, friends, and job, for a share of that finite time and energy. The greater those other forces—and they are particularly great for adult students—the less time and energy students have to devote to their educational development. Here we have all of the classic ingredients of a zero-sum game.

But we can help students become better managers of their time by suggesting and providing significant opportunities for trade-offs. One set of trade-offs involves the transference of "discretionary" activities to the campus. Take employment, for example: it has been found that holding a part-time job on campus has beneficial effects on retention, whereas the same type of job held off-campus does not. While residential students stand a better chance than do commuter students of developing a strong attachment to undergraduate life simply by virtue of the amount of time they spend on campus, both groups can use work and social activities to increase that time. It is no coincidence that students who spend a great deal of time on campus interact far more with faculty outside of class than those who do not; and research has demonstrated that frequent interaction with faculty is more strongly related to satisfaction with a college—with its courses, its intellectual environment, its social environment, and even its administration—than any other type of involvement.

It is not only the amount of time one can allocate for learning but the quality of effort within that time that makes a difference. Part of this idea of quality of effort has to do with

intensity. Is the student reading in such a way as to comprehend the material in the text, or simply staring at the pages and daydreaming? Is the student listening intensely or simply engaging in frivolous dialogue? Such intensity is difficult for instructors and colleges to control. But quality of effort also refers to the extent to which learning is active rather than passive, and colleges clearly can control the conditions of active learning by expecting students to be participants in, rather than spectators of, the learning process.

Many features of the teaching and learning environment in colleges and universities can be altered to yield greater student involvement in higher education. The fact that more learning occurs when students are actively engaged in the learning process has extensive implications for each faculty member and administrator in every institution. The most important implications of this fact can be stated in two fundamental principles about the conditions of educational excellence everywhere:

1. The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program.

2. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement in learning.

These two principles are the basis of the recommendations we will offer on how to increase student involvement. In the final section of this report, we will specify what students themselves can do to become more active participants in the learning process.

High Expectations

The second major condition in effective learning, high expectations, describes the educational outcomes sought by students and institutions. They include graduation requirements (the "what" of learning) and standards—a category of expectations that refers to the level of performance expected (the "how well" of learning). While the role of institutional expectations in influencing college student achievement is a topic that few have studied, student performance clearly rises to these expectations, and students respond positively to reasonable challenges. When educators expect too much—when we as teachers are unrealistic—student learning and persistence suffer. When we expect too little, we will seldom be disappointed.

At the same time, students' expectations about themselves must match the realities of the institutions they attend. When there is a mismatch, students are not sufficiently motivated and the necessary involvement in learning does not occur.

What is particularly important here is that institutional and faculty expectations about the requirements of college-level learning and development in all courses and programs be *public*. Students, their families, and others must know not only what is expected, but how well it is to be performed. Considerable evidence indicates that at the elementary and secondary levels, clearly and publicly stated high standards of performance act as spurs to greater achievement, largely because students come to share those standards with their schools. We see no reason to assume that this process of identification operates differently in higher education.

The same phenomenon can be observed at the level of the program or individual course. Learning is enhanced when both expectations and standards are clear, and when they are actively shared by faculty and students. Students are more

likely to achieve at a high level and to be satisfied with a course if it meets their expectations than if it does not. By this we do not mean to suggest that student expectations should arbitrarily govern curriculum and the content of individual courses—quite the contrary. But we firmly believe that those charged with curriculum and instruction in our colleges should understand what students expect, and should reciprocate by clearly communicating to students the learning objectives of college-level programs and courses.

Assessment and Feedback

The third condition of excellence is regular and periodic assessment and feedback. The use of assessment information to redirect effort is an essential ingredient in effective learning and serves as a powerful lever for involvement. This is true whether the learner is a student, a faculty member monitoring the progress of students, or an administrator seeking to identify the educational strengths and weaknesses of a college and its academic programs.

While student involvement and expectations cannot be controlled directly, assessment and feedback constitute indirect means of control. Thus, higher education should ensure that the mounds of data already collected on students are converted into useful information and fed back in ways that enhance student learning and lead to improvements in programs, teaching practices, and the environment in which teaching and learning take place.

We argue that institutions should be accountable not only for stating their expectations and standards but for assessing the degree to which those ends have been met. In practical terms, our colleges must value information far more than their current practices imply. They should make a conscientious effort to acquire and use better information about student learning, the effects of courses, and the impact of programs.

We believe that assessment can be used to increase student involvement and to clarify expectations if it is designed to measure improvements in performance, and if the information so gathered is fed back to students, faculty, and administrators as the basis for making changes in individual effort, program content, and instructional methods. What may be obvious here—and will become more obvious in the following pages—is the crucial relationship between assessment, expectations, and involvement: students respond positively to information on their performance in relation to institutional expectations, and, as a consequence, are likely to become more involved in learning.

* * *

This brief analysis of involvement, expectations, and assessment is intended to serve as a general framework for our recommendations. These recommendations also reflect our shared values, some of the critical warning signals we cited, and other broad concerns brought to our attention over the past year.

In the pages that follow, we make recommendations about the goals of undergraduate education and about practical steps for achieving them. We have asked which factors influencing student learning can be changed and which of the possible changes are cost-efficient and make the most sense.

We do not pretend to have all of the answers. In fact, we are counting on the ingenuity of students, faculty, deans, college presidents, and others to come up with alternatives or with variations on what we present here. The considerable diversity of American higher education requires those alternatives and variations. We urge our readers in the higher education community to ponder and discuss these recommendations in the months ahead, and to begin implementing the results of those thoughts and conversations in the near future. For it will take a few years to put these strategies into practice, and a few more to observe their effects. In offering our recommendations we ask of our readers no less than we ask of our students—to take higher education seriously.

Recommendations for Increasing Student Involvement

What are the implications of our analysis of student involvement as a key to student learning? Administrators and faculty must recognize that virtually every institutional policy and practice—from class schedules, attendance regulations, and research participation to work-study, faculty office hours, student orientation, and parking—affects the way students use their time and the amount of effort they devote to academic pursuits.

Administrators and faculty must also recognize the extent to which instructional practices affect student involvement. Traditional classroom teaching practices in higher education favor the assertive student. But our analysis indicates that instructors should give greater attention to the passive or reticent student. Of course, not all passive students are totally uninvolved in their academic work, nor are they necessarily experiencing academic difficulties; and shy or reticent students are not necessarily passive. But passivity is an important warning sign that may reflect a lack of involvement that impedes the learning process and leads to unnecessary attrition. Students who say they are bored are too often on the road to dropping out.

One of the greatest challenges to administrators and faculty alike is to find ways to enhance the involvement of an increasingly diverse student body. The majority of students attend college under conditions that render either the quantity or the quality of active involvement difficult. Well over half commute to campus rather than live on campus, and over two in five are enrolled part-time—both circumstances that tend to make the learning experience tangential to their lives. Many attend very large institutions in which passivity is encouraged by an impersonal environment.

In fact, the power of the campus as an environment for fostering student involvement is crucial. The physical campus itself can attract or alienate students, but our uses of the physical campus can overcome many limitations. In addition, every college has a distinct culture—nonverbal messages that students pick up from virtually every aspect of campus life. Administrators' attitudes toward students, the degree of collegiality among faculty, the number and diversity of cultural events, the degree to which the college interacts with its surrounding community—all of these factors, and others, determine the tone of the environment.

If students are reluctant citizens of a campus, the degree and quality of their involvement in learning will suffer. The recommendations we offer below are designed to help administrators, faculty, governing bodies, and students themselves improve their learning environments. If followed, the active involvement of students in their own learning will increase, and dropping out due to "boredom" will become less common.

1.

College administrators should reallocate faculty and other institutional resources toward increased service to first- and second-year undergraduate students.

We call this strategy "front-loading." It is designed to improve student retention rates by utilizing the key levers of student involvement. It stands to reason that increased retention will result in greater student learning.

This recommendation requires the following corollary steps:

- Classes for first-year students should be designed to provide adequate opportunities for intense intellectual interaction between students and instructors.
- Deans and department chairs should assign as many of their finest instructors as possible to classes attracting large numbers of first-year students.
- Department chairs in institutions employing graduate students as instructors should use them selectively and take measures to ensure that they are well prepared for their responsibilities.
- Registrars and deans should ensure that sufficient places are reserved for first-year students in an adequate range of courses.
- Colleges and community colleges must guarantee that first-year students have access to a stable body of well-trained advisors, including faculty, administrators, and peers, and that the advising system maintains regular contact with students.

- States should revise funding formulas so that institutions receive as much money for freshmen and sophomore students as they do for junior and senior students.

In proposing these steps, we recognize the critical importance of the first year of the college experience, whether in a two-year or a four-year institution. At the present time, first-year students are ill served by many of our institutions of higher education. They are often closed out of course selections, treated impersonally, and given lower priority in academic advising than sophomores, juniors, and seniors.

Because of current funding formulas that allot more funds for upper division students than for freshmen and sophomores, public institutions have no incentive to increase their service to lower division students. And four-year colleges and universities, in turn, offer faculty few incentives to emphasize the teaching of freshmen and sophomores. Besides doing nothing to facilitate the transition from high school to college or to foster the learning skills necessary for success in college, these procedures result in alienation and unacceptably high attrition rates.

It is not our intention to eliminate all possibilities for failure in college education, as some experience of failure can provide valuable learning. Rather, we intend to ensure that when students fail there are people around to help them understand why they failed and how to avoid the same situation in the future.

Our recommendation to increase funding for first- and second-year students will involve either additional costs or a reallocation of existing resources. But we know that by concentrating faculty and other resources on those students, we increase the probability of involvement, retention, learning, and in community colleges (where the thrust of our recommendation falls principally on the first year), of transfer to four-year institutions.

2.

Faculty should make greater use of active modes of teaching and require that students take greater responsibility for their learning.

This recommendation is about the more effective delivery of academic programs through diversifying teaching styles. We are making it in the conviction that the passive student is one of the greatest challenges facing higher education.

Lectures are an essential part of campus life. They can be useful, economical, and effective. But research suggests that a mix of teaching styles can be an effective device for increasing involvement. We have examined a variety of approaches to active modes of teaching and learning, and recommend that college faculty increase their use of the following:

- involving students in faculty research projects and classes held in the field
- encouraging internships and other forms of carefully monitored experiential learning
- organizing small discussion groups, especially in large classes
- requiring in-class presentations and debates
- developing simulations in appropriate subjects
- involving practitioners as visiting teachers
- creating opportunities for individual learning projects and supervised independent study

The point of these methods is this: while one can ask what a chemist, for example, knows, one is not involved in that knowledge until one does what a chemist does. The same observation can be made about a historian or a sociologist. To do a discipline means to speak it, to work with its primary materials, to follow its processes, and to adopt its perspective. Active modes of teaching require that students be inquirers—creators, as well as receivers, of knowledge.

By no means do these active approaches avoid the content or raw material of the disciplines. By no means do we intend to abandon standards of content in favor of exotic teaching techniques. Quite the contrary, our contention is that students are more apt to learn that content if they are engaged with it. Effective teachers care passionately both about their subject matter and about their students. They are concerned with getting their students to hone their skills in writing and speaking, to extend their abilities in critical thinking and analysis, and to develop their capacities to synthesize, imagine, and create. These capacities and skills are the truly enduring effects of higher education.

3.

Learning technologies should be designed to increase, and not reduce, the amount of personal contact between students and faculty on intellectual issues.

Since no factor seems to account for student learning and satisfaction with college more than faculty contact, we are concerned about any technology that has the potential of diminishing significant intellectual contact between faculty and students, and of removing the passion from learning. New technologies can have a tremendously beneficial impact on undergraduate learning, but the narrative evidence we have examined suggests that most of our current uses of computers, other forms of programmed instruction, language laboratories, and televised instruction isolate the learner from the teacher and the teacher from the assessment process. When colleges race to install as many microcomputers as possible, only to use them as drill sergeants or as the exclusive source of instruction in problem solving, we question whether they are concerned more with acquiring the machinery than with using it well.

We are also concerned that the distribution of technological resources may be uneven. Corporations seem to have assisted in establishing "the wired university" principally at prestigious and/or technologically oriented institutions. Students at state colleges, historically black colleges, denominational liberal arts colleges, and community colleges should have equal access to the potential benefits of this technology.

Administrators and faculty must plan more carefully for the introduction and application of learning technologies so as to enhance the quality of undergraduate learning, and to foster interaction between students and faculty and among students.

The ways in which this objective can be realized in the case of microcomputers include (but are not limited to):

- organizing group projects that utilize computer technology in bringing together the raw stuff of information for analysis;
- creating opportunities for student participation in faculty research using computer technology;
- having students and faculty write programs and software applications together; and
- providing computer conference hours during which students can talk with one another and with faculty through a computer network.

These strategies are all variations on the active modes of teaching and learning previously recommended.

4.

All colleges should offer a systematic program of guidance and advisement that involves students from matriculation through graduation. Student affairs personnel, peer counselors, faculty, and administrators should *all* participate in this system on a continuing basis.

We have previously recommended a strong advising system for first-year students. But in this recommendation we are confronting a broader problem: advisement is one of the weakest links in the education of college students. Many faculty members do not participate in advisement, and those who do often treat this responsibility perfunctorily. Peer advisors are either not trained or poorly trained and, like many faculty, rarely understand the dynamics and objectives of the institutions in which they live and work. Administrators too often stay aloof from the entire system of guidance and advisement. Larger community colleges and universities also face a severe problem in coverage: there are simply not enough faculty and staff to serve students well.

What are some practices that have the potential to make guidance and advising more effective?

- Having academic administrators serve as advisors. Each academic administrator, from department chairs on up, should advise a few students. This approach has secondary benefits. It provides administrators with very direct means of finding out what is happening to students.

- Using the telephone to check in and talk with student advisees. The personal office visit is not the only way to cover the territory. Even so simple a tool as the telephone can help reach more adult and part-time students, in particular.

- Providing short but intensive training periods or workshops for advisors. These workshops can help separate myths from realities on such matters as the goals, policies, and procedures of the institution, the nature of the student body, the nature and purposes of placement testing and other assessments, and the relationship of curriculum to careers.

- Assuring continuity and focus. While some students will seek advice from many sources, having one individual who follows the student through the college career works better than having three who are responsible for advising at different points in the college career. Different advising systems—one for freshmen, one for majors, and one for job placement, for example—tend to be more expensive for the institution and more confusing to the student. When it becomes necessary for a student to change advisors, the process should be orderly and there should be consultation between old and new advisors.

5.

Every institution of higher education should strive to create learning communities, organized around specific intellectual themes or tasks.

This is the first of two recommendations we make concerning the creation and strengthening of communities *within* colleges. Effective learning communities such as those built around common themes (for example, ethics in science) can strengthen opportunities for intellectual dialogue and other forms of active learning. The larger the institution, the more critical these niches are in providing a meaningful academic identification for students.

Effective learning communities have a number of distinctive features:

- They are usually smaller than most other units on campus.
- They have a sense of purpose.
- They help overcome the isolation of faculty members from one another and from their students.
- They encourage faculty members to relate to one another both as specialists and as educators. (In effect this encourages the development of new faculty roles.)
- They encourage continuity and integration in the curriculum.
- They help build a sense of group identity, cohesion, and "specialness."

The academic activities of learning communities should be credit bearing for both faculty and students. They can involve groups of courses from different departments, seminars based on the special theme or task the group is pursuing, or research (basic and applied) in cooperation with external agencies, business firms, or community organizations.

Dormitories can be organized to offer their own academic programs and are thus one working model of what we have in mind. But for the commuter, adult, and part-time students in our institutions, other approaches—such as weekend colleges and short-term but intense periods of residence on campus—are necessary. Honors programs organized around a specific theme (as opposed to "general honors") can also become learning communities.

In addition, the loose association of students majoring in a given subject can be transformed into a more tightly knit community, but frequently the number of students majoring in a field may be too large to form an effective community. Many students develop a consuming focus on their majors in order to establish academic identity. But we hold that academic identity should not be limited to the major. Precisely because of the need we see for breadth of study, integration of knowledge, and the application of what is studied to life, it is critical to establish intellectual communities beyond the major.

These communities are particularly important for first- and second-year college students, who can thus be allowed to experience the joy of group learning and peer support. Group learning, we should point out, is far more characteristic of the workplace than it is of the university. Employers frequently cite the ability to learn and work in groups as a key predictor of success on the job.

6.

Academic and student service administrators should provide adequate fiscal support, space, and recognition to *existing* cocurricular programs and activities for purposes of maximizing student involvement. Every attempt should be made to include part-time and commuter students in these programs and activities.

When we look around in colleges, community colleges, and universities, we see student activities that are, in effect, latent communities. We recommend strengthening those existing activities that have academic functions or academic overtones. Examples would include debate teams, language clubs, publications, performance groups, political clubs, and international exchange groups. Research has adequately demonstrated that, when they are strong and well supported, these associations of peers of all ages have strong holding power.

Many of these activities are time consuming and hence not very attractive to part-time and commuter students. In some cases, however, one can take the activity to part-time commuter students instead of expecting that they travel to participate in the activity. Colleges should thus invite residential students to travel occasionally to locations for activities in which commuter students could participate. They should fund these activities to increase the participation of commuters.

For cocurricular programs and learning communities to succeed, administrators must reward faculty and staff contributions to these efforts. There are resource implications here no matter what form the reward takes (e.g., preferential travel to professional meetings, student assistants on research projects, promotion, or outright compensation), but these costs should be assessed in the light of the considerable benefits of greater student involvement.

7.

Academic administrators should consolidate as many part-time teaching lines into full-time positions as possible.

The motive behind this recommendation is also environmental and bears on student involvement. Strong faculty identification with the institution and intense faculty involvement with students requires a primary commitment. Part-time faculty have difficulty making such a commitment, and this is especially true of those who teach courses before or after they work at another full-time job and who are not available—or prepared—to serve in advisory roles to students. In our minds, one full-time faculty member is a better investment than three part-timers, largely because the full-time faculty member contributes to the institutional environment in ways that go beyond teaching courses.

Part-time positions should be used to attract individuals with special talents and abilities and to provide flexibility in staffing special programs, *not* as a method for obtaining cheap labor. In certain fields some faculty are, by custom and necessity, employed on a part-time basis. Accountants, lawyers, clinical psychologists, architects, and other practicing professionals are often employed every year to teach one or two special courses. Administrators should encourage these instructors to strengthen their ties with the institution, to have contact with students outside the classroom, and to participate in the institutional environment as fully as possible.

Recommendations for Realizing High Expectations

Expectations refer to the educational outcomes sought by students and institutions. The educational expectations of a majority of college students and their families are focused on the bachelor's degree as a symbol of academic achievement. The expectation of the institutions awarding that degree is that it be more than a symbol, that it be widely recognized as a worthy credential of academic learning. There are many other certificates and licenses one can earn in a lifetime, but the bachelor's degree is basic to higher education. Therefore, it has to mean something of common—but high—value. In that respect it is like a currency.

The issue addressed by the following recommendations is the meaning of the bachelor's degree. The recommendations also speak to our expectations for faculty as teachers and scholars. These sets of expectations are important because they recognize the significant influence of undergraduate education on other levels of education: on requirements and standards at the secondary level and on requirements for Ph.D. candidates who intend to pursue careers in college-level teaching.

Recent evidence suggests that many students are increasingly reluctant to undertake courses of study in college that challenge their academic skills, especially their verbal skills. We can cater to this avoidance or we can set requirements that encourage students to develop these skills. This is one of the more important choices facing higher education today.

Our recommendations on these matters are designed to encourage institutions to make clear statements about the standards of performance in college-level subjects necessary for awarding degrees; to require coherent programs that ensure

breadth of learning and integration of knowledge across both liberal education and professional fields; and to point a consistent direction for faculty and other institutional officials concerning their roles as teachers, scholars, and leaders.

8.

Faculties and chief academic officers in each institution should agree upon and disseminate a statement of the knowledge, capacities, and skills that students must develop prior to graduation.

We are hereby recommending that postsecondary institutions be less grandiose in their statements of goals and far more specific about their objectives. It is not sufficient that the lists generated by faculty and academic officers recite symbolic terms like "critical thinking," "problem solving," or "creativity." We recognize that not all of the outcomes of an undergraduate education can be specified in such a way as to be easily quantified. But this does not relieve us of the responsibility to define the knowledge, capacities, and skills we expect students to attain. For example, it is fair for a student to ask what we mean by "critical thinking," and it is fair to expect a faculty member to provide a satisfactory, detailed response. And it is fair to ask those institutions that include value education as part of their mission to specify the values they are attempting to teach. If we want students to become more responsible for learning, then colleges must be more articulate in presenting their exit standards. As we have noted previously, research on effective elementary and secondary schools strongly suggests that clearly communicated, detailed statements of this kind are positively related to student achievement.

Many students enter college with only vague notions of what undergraduate education is all about, where it is supposed to lead, and what their institutions expect of them. We believe that the clearer and the more public our statements about what we expect, the more likely students are to map an appropriate course of study, not only for their college years but for their high school years as well. In fact, we urge colleges to share those statements with secondary schools. As a happy

by-product of such statements, we would expect better preparation of high school students. It is also likely that we will eliminate curricular redundancies and provide better information to high school students and their parents in choosing where to attend college.

Publication of a widely known and understood list of academic expectations for students should also improve classroom instruction and facilitate the integration of college curricula. Faculty typically focus on their particular subject matter and often lose sight of the ways in which their subject contributes to the entire curriculum. By clarifying the capacities students are supposed to develop during the four years of college, faculty remind themselves of what they are supposed to be doing in their own classes.

9.

All bachelor's degree recipients should have at least two full years of liberal education. In most professional fields, this will require extending undergraduate programs beyond the usual four years.

We are recommending what some might regard as a radical restructuring of undergraduate professional programs in fields ranging from agriculture, business administration, and engineering to music, nursing, pharmacy, and teacher education.

When we look carefully at the curricula prescribed for students in such four-year professional programs, it is clear that they offer few opportunities to develop the capacities and knowledge that most institutions would expect of baccalaureate graduates. Our objective in expanding those opportunities is to strengthen undergraduate professional degree programs and the future options of students who pursue them. Students are not likely to accumulate in four years both the generalized and special knowledge necessary for first-rate performance as professionals. This fact has long been acknowledged in baccalaureate degrees in architecture (most of which require five- or six-year programs) and in many undergraduate programs in engineering (which offer five-year options).

Some undergraduate professional programs require a clinical experience or internship. We believe that a broader liberal arts background will enrich the clinical experience of students in these fields. Yet it is difficult for any course of study to include a liberal arts education, professional preparation, and a clinical experience in the span of four years.

We realize that there are barriers to the implementation of this objective, not the least of which is probable student resistance to the prospect of spending more time and money on college education. We argue that if the undergraduate

professional degree is strengthened, and if employers have more confidence in what stands behind that credential, then students will be under less pressure to pursue graduate degrees in the professional field.

Clearly, accreditation standards must be altered if they are to be consistent with this recommendation. The higher education community should encourage specialized accreditation associations to make these alterations.

A special word is necessary about teacher education programs, since it is through them that our colleges and universities exercise the most direct influence on the quality of schooling in the United States. Changing the parameters of the undergraduate professional degree program in teacher education is a necessary—but not a sufficient—step toward improving the quality of the teaching profession. In addition, we recommend that colleges and universities treat admission to the undergraduate program in teacher education as they would an honors program; require a sustained, rigorously evaluated internship in a school at an early point in the college career of prospective teachers; recruit faculty from the disciplines to join in the instruction and supervision of future school teachers; and make greater use of the research on effective teaching and effective learning environments in the teacher education curriculum. All of these steps are intended to ensure that the teacher education candidate becomes a person who is both competent in a subject and capable of offering high quality service in a variety of settings.

10.

Liberal education requirements should be expanded and reinvigorated to ensure that (1) curricular content is directly addressed not only to subject matter but also to the development of capacities of analysis, problem solving, communication, and synthesis, and (2) students and faculty integrate knowledge from various disciplines.

Here we identify the critical elements of a liberal education and recommend that they be specified in such a way that standards of content are clear. Liberal education seems to have fallen out of favor over the past two decades, particularly with parents and students who have come to believe that the best insurance in a technological society is a highly specialized education that will lead to a specific job. However, no one knows precisely how new technologies will affect the skills and knowledge required by our future labor force. We thus conclude that the best preparation for the future is not narrow training for a specific job, but rather an education that will enable students to adapt to a changing world.

Successful adaptation to change requires the ability to think critically, to synthesize large quantities of new information, and to master the language skills (critical reading, effective composition, clear speech, and careful listening) that are the fuel of thought. Adaptation to change requires that one draw on history and on the experience of other nations, and that one apply the theories and methods of empirical investigation. It requires a disposition toward lifelong learning and the ability to partake of and contribute to the richness of culture and citizenship of our Nation. These requirements are as relevant to the future medical technician in training at a community college as they are to the biology major at a university. To fulfill them is to achieve a liberal education.

We know that a liberal education curriculum will not

454-737 O - 84 - 4

and cannot be the same for students of all levels of ability, ages, and interests. But we are convinced that what should distinguish the baccalaureate degree from more specialized credentials is the broad learning that lies behind it. An increase in liberal education requirements is one way to guarantee that comprehensiveness.

But simply adding requirements—or offering students a larger set of liberal arts courses from which to select—does not achieve one of the principal aims of liberal education, the ability to integrate what one has learned in different disciplines. What happens too often when liberal education requirements are increased is fragmentation, as departmental politics come to overwhelm learning objectives. Instead, the reform of liberal education must

- be based on collaboration among faculty from different departments, such as that which occurs when faculty from all disciplines work together to improve the substance, coherence, and persuasive power of student writing;

- establish specific integrative mechanisms such as senior seminars and theses that require reflection on the knowledge gained in previous years of college; and

- require that students actively apply learning from different disciplines in individual or group projects that open the windows of their learning to the world beyond.

We stress the ability to synthesize for three reasons: (1) the evidence strongly suggests that college students have considerable difficulty with abstractions and models that are the grounds of advanced study in the disciplines; (2) the task of integrating knowledge, though central to liberal education, is frequently ignored in favor of analysis; and (3) the ability to synthesize is necessary for the development of judgment and for the application of academic learning to real life situations.

11.

Each institution should examine and adjust the content and delivery of the curriculum to match the knowledge, capacities, and skills it expects students to develop.

This recommendation is purposively phrased in general terms because we cannot prescribe a single curriculum, set of expectations, or system of self-study for all colleges, community colleges, and universities. Our point of view is that it is meaningless to announce clear expectations for students and not study the existing curriculum and adjust academic programs to meet those expectations.

What does it mean for faculty to examine the content, delivery, and organization of the curriculum? It means digging below the level of course syllabi to analyze what students are learning. It means studying the different modes of instruction to determine what each accomplishes. It means using the literature on student learning and development to inform changes in the content and delivery of the curriculum. For example, if we have learned that students retain knowledge best through inductive reasoning and other direct experience with subject matter (e.g., mentored research), then we should modify our teaching accordingly. If we know that leadership skills are better learned in informal, task-oriented groups than in the classroom, then we have an opportunity to use student organizations to further academic objectives, and strengthen the connection between academic and student affairs in the process.

Yet another important reason for institutionalizing and regularizing the process of self-study and curricular adjustment is an ethical one. If the college promulgates statements of expectations for student learning, it has the obligation to provide the kinds of learning experiences that will help students achieve these objectives.

12.

Community colleges, colleges, and universities should supplement the credit system with proficiency assessments both in liberal education and in the student's major as a condition of awarding degrees.

This recommendation is intended to provide a warranty for postsecondary credentials and hence increase their value for students. Higher education must take the lead in establishing supplements to the almost exclusive reliance on credits and grades that are too often substituted for measures of learning. The practice we recommend will ensure that students take their general education or liberal arts requirements as seriously as they take their vocational or professional programs. It will also drive course selection and discourage the choice of the frivolous, thus guiding students to allocate and use more of their time for academic learning.

Faculty may choose from a variety of available standardized tests for this purpose, may develop their own examinations, or may use means other than paper-and-pencil instruments to assess student performance. Needless to say, the tests or methods selected should be appropriate to the knowledge, capacities, and skills to be measured; and they should be widely promulgated so that the public will recognize that what is being assessed is college-level learning.

The most useful analogy for the way these tests might be offered is that of a professional licensing examination. When one takes such an examination—to become an accountant, architect, lawyer, nurse, or teacher—one must prepare for that examination independently of courses. The examination itself assesses an individual's grasp of principles, methods, and knowledge that should have been acquired in formal course work and related experience. For community college students

seeking transfer to four-year institutions, the warranty implied by this assessment is very important.

At one time, the comprehensive exam in the major was far more common than it is now. We are recommending that this largely abandoned tradition be reinstituted for majors as well as for liberal education.

13.

Institutions should offer remedial courses and programs when necessary but should set standards and employ instructional techniques in those programs that will enable students to perform well subsequently in college-level courses.

We intend this somewhat generalized statement of goals to cover the following specific strategies and policies to improve rates of student persistence and success:

- Students assigned to remedial programs should carry limited course loads, but they should be encouraged to include at least one course per semester in an area of academic interest to them.

- Remedial courses should be accompanied by a variety of means (including support groups and greater use of peer tutors) to enhance students' self-esteem, academic identity, and sense of direction in life.

- Remedial programs should place heavy emphasis on communications skills, and on reading, writing, and listening skills in particular.

- In no case should final standards of performance in remedial courses in English be normed at less than twelfth grade levels.

Remedial programs are not a new phenomenon in American higher education. In the nineteenth century, many colleges and universities operated "preparatory departments" that provided instruction in precollege subjects not offered in many secondary schools of the time. But as higher education has expanded in more recent years, entering students have

become more diverse in terms of their preparation. While we would hope that the recent recommendations of various national commissions have stimulated reforms at the middle and secondary school levels that will rectify this situation, the fact is that higher education must live with this diversity for some time to come. We can bemoan the state of affairs, we can duck the problem by forbidding colleges to offer remedial work, we can offer perfunctory remedial programs, or we can make those programs work while respecting the standards for college-level performance that should lie behind the baccalaureate degree. The Study Group recommends the last of these options.

All of these strategies are designed to ensure student success in the upper division of college, to release students from remedial programs with heightened confidence that they can attain the degree and learn a great deal in the process. Just as was the case a century ago, the student who enters college in need of remediation may take longer than average to earn the baccalaureate. We must be honest with ourselves and our students and admit this obvious fact. If achievement is the ultimate purpose of schooling, we contend that students should be able to move through the system at their own pace.

We discussed the difficult problem of awarding credit for remedial courses, and concluded that this critical decision should be made by individual institutions. While many institutions currently do not allow remedial courses to count as credit toward the degree, research suggests that students may actually learn more from such courses if they are offered for credit.

In recommending that students in remedial courses take a reduced course load and that their course schedules include classes of interest to them, however, we seek a realistic framework for student achievement. The opportunity to participate in an appropriate portion of the regular curriculum is critical to the retention of these students.

By urging the standard of a twelfth grade norm for completing remedial English classes, we are underscoring the fact that anything less—particularly in reading—leaves students wholly unprepared for the demands of college-level courses and does them a disservice.

14.

In rewarding faculty through retention, promotion, tenure, and compensation, all college officials directly responsible for personnel decisions should both define scholarship broadly and demand that faculty demonstrate that scholarship.

We believe that keeping current in one's field is vital to good teaching and that any attempt to denigrate the importance of scholarship will be harmful to the quality of undergraduate instruction. We favor a learned professoriate, and we believe that love of subject matter is essential to effective teaching. A broader definition of scholarship, we believe, will encourage faculty members and institutions to be more realistic in their expectations.

The true frontiers of knowledge in any academic field are usually explored by but a handful of researchers, and most of their discoveries or "breakthroughs" are found in notebooks and correspondence long before being reported in academic journals and subsequently cited by anyone writing about the field. We expect this level of research from such a small percentage of the American professoriate that it is patently unrealistic to set similar standards for the rest. Most of the "research" activity of faculty, on the other hand, can be called "scholarship," and much of it will never lead to publication in the major juried journals of a discipline. These basic facts have been well documented by those who have studied the academic professions.

Publication is a critical act of professional communication, and we do not mean to disparage it. Unfortunately, the prevailing norms of the reward system in American higher education define acceptable scholarship and publication in ways that preclude some forms of productive academic inquiry, and actually discourage faculty from exploring the unknown. Longitudinal research in the social sciences, for example, is a

risky undertaking for a junior faculty member who must produce a certain number of journal articles in a short period of time to qualify for tenure. The same observation can be made of historical inquiries that require the painstaking process of gathering and analyzing original sources that may be located all over the world. In the process of judging faculty for tenure or promotion, we also often overlook the very dissimilar patterns of dissemination of knowledge in the disciplines. The biologist has access to "research notes" sections of journals that can publish many pieces of a long-term series of experiments in process. The philosophy professor does not.

Since the research process is an active form of learning, it is reasonable to expect students to acquire some competence in research. Therefore, we assume that faculty will be actively involved in the research enterprise and will integrate their scholarly work into the instructional process. This integration cannot be accomplished solely by assigning current scholarly books or articles in a course or by lecturing on topics from that literature. It is more critical that the professor replicate the forms and processes of research to improve the learning experience of students.

15.

College presidents should strive to ensure that the behavior of their institutions evidences the ideals of honesty, justice, freedom, equality, generosity, and respect for others—the necessary values of community.

Students are quick to spot hypocrisies and inconsistencies in institutional behavior. They know when stated values are subverted by an institution's failure to apply the same standards of conduct to everyone. This failure leads to student cynicism—and cynicism reduces involvement.

College presidents cannot condone a professor's cheating with research data and expect students not to cheat on examinations. They cannot condone a professor's shortchanging the students and the institution in favor of outside activities and expect students to focus their primary commitments on learning. Nor can they tolerate the exploitation of student athletes and expect other students to respect their college's public claims that its fundamental values are academic.

This recommendation differs from most of our other offerings in that it does not call for a specific action. Rather, it is an exhortation directed to those leaders who are ultimately responsible for maintaining the values and standards for which colleges and universities have stood since their creation. If we expect students to develop values that are consonant with those of a democratic society, if we expect them to understand what ethical behavior means and how necessary it is to family, community, and national life, then the leaders of academic institutions must ensure that this tone dominates the campus environment.

Recommendations for Assessment and Providing Feedback

In this report, we are interested in assessment as a means to provide information about the teaching and learning process and as feedback to help improve the effectiveness with which students, faculty, and the institution carry out their work. We thus believe assessment to be an organic part of learning.

The use of tests to sort and screen is legitimate for professional certification and licensing—and, indeed, for any operation where selection is necessary. But assessment has even greater potential as a tool for clarifying expectations and for increasing student involvement when it is used to measure improvements in performance.

Consider, for example, the ways in which the assessment of such improvements can provide a much more explicit means of maintaining academic standards than most institutions currently possess. If demonstrable skill in analytic reasoning is put forward as a requirement for awarding the baccalaureate, and if an institution currently administers a test of that skill in the student's junior or senior year, a similar test can be given to entering freshmen. This pretest assessment would offer a clear-cut indication of how much students must improve their analytic skills in order to reach the standards for graduation.

As we frequently note, the values of institutions are often revealed by the information they gather and use. If a college regularly seeks longitudinal data on how much students are actually learning and developing, then that institution explicitly places a high value on its responsibility to change and educate its students. Some educators may fear assessment because it smacks of quantitative management of the learning

experience, or may believe it is too costly for the results it achieves. But we are not interested in measurement for measurement's sake, rather in the potential of measurement—of individual students, programs, or entire institutions—to improve learning. We admit there may be some additional costs involved in assessment programs. In cases where assessments are designed primarily to evaluate programs or institutions, however, considerable cost savings can be effected by using *samples* of students.

The logical extension of this analysis suggests the following specific recommendations.

16.

Faculty and academic deans should design and implement a systematic program to assess the knowledge, capacities, and skills developed in students by academic and co-curricular programs.

It is futile to adjust the content and delivery of programs in accordance with redefined, detailed objectives unless one has some ways of knowing whether those adjustments have been successful. A comprehensive assessment program will help faculty determine what works and what does not. By assessment and testing we include here the widest possible range of techniques: essays, interviews, portfolios, and performance examinations, as well as the traditional standardized tests.

It is especially important that these assessments allow for judgments of the impact of curriculum and instruction on verbal and quantitative skills, analytic reasoning, and the ability to synthesize, as well as on such characteristics as organizational and human relations skills, and on understanding of cultural and intellectual diversity.

If this type of assessment program is to measure the impact of a college's work, then entering students should be tested on the knowledge, capacities, and skills identified by the faculty as common parameters of student learning and growth, and graduating students should be tested on the same dimensions. Without both measures, we cannot tell how much change has occurred, nor can we begin to understand whether that change was the result of different course-taking patterns or other college experiences. Some institutions may find it useful to ask their alumni to participate in such a program. This participation could provide invaluable information on the longer range impacts of higher education.

This type of program has other benefits. For one, a

more elaborate system of pretesting than most institutions currently use will provide better information for student advising and placement. Moreover, if faculty are involved in choosing the assessment procedures and instruments and in evaluating student responses, they will be more likely to make appropriate adjustments in the content and delivery of curriculum. For the entire college, better baseline information on incoming students should spur more realistic and effective academic and student service programs and draw students' attention to the outcomes their college values most.

We recognize that the initial implementation of this recommendation requires additional cost to institutions in terms of faculty time and support services. After the system is designed and implemented, however, the costs of maintaining it drop while the benefits to faculty and students increase.

17.

In changing current systems of assessment, academic administrators and faculty should ensure that the instruments and methods used are appropriate for (1) the knowledge, capacities, and skills addressed and (2) the stated objectives of undergraduate education at their institutions.

This task may require colleges to seek the assistance of consultants or the national testing services in the process of reviewing and adopting appropriate approaches to assessment. Although a wide range of instruments and methods is available, colleges too often select an instrument or technique that responds neither to the objectives nor the nature of their academic programs. The result is an inefficient information system.

All instruments and methods used in assessment should reflect the level of subtlety and complexity at which college subjects are taught and learned. Faculty will justly resist resting their teaching reputations on simplistic multiple-choice examinations.

18.

Faculty should participate in the development, adoption, administration, and scoring of the instruments and procedures used in student assessment and, in the process, be trained in the ways of using assessment as a teaching tool.

The best way to connect assessment to improvement of teaching and learning is to ensure that faculty have a proprietary interest in the assessment process. Unlike practice in some other nations, the American system does not rely on third-party testing. In our system, the person who teaches is the same person who certifies student learning. It makes sense to ask that person to be involved in every step of an assessment program. We believe that such involvement will help faculty to specify—far more precisely than they do at present—the outcomes they expect from individual courses and academic programs. And the more precisely they can specify the outcomes, the more likely they are to match teaching approaches to those ends.

"Faculty development" carries negative overtones for many, but in the case of learning how to use assessments as teaching tools, it may be necessary. Some of the recently introduced instructional technologies embody the principle of assessment-as-instruction, but their processes are often very mechanistic and remove the human and subjective elements from both assessment and learning. We do no great favor to our students by pretending that subjectivity does not exist in judgments of performance in the world. And we offer our faculty no great insights into the teaching and learning process if we assume a single, standardized learning style such as that built into most software. Assessments involving publicly stated criteria for different levels of performance, on the other hand, strike us as a happy mean between subjectivity and the rigidity of some of the newer technologies.

We thought about the idea of selected faculty involvement in this process, as well as about special rewards and incentives. But, on reflection, it struck us that this activity is so central to the instructional function that it requires full faculty participation.

19.

College officials directly responsible for faculty personnel decisions should increase the weight given to teaching in the processes of hiring and determining retention, tenure, promotion, and compensation, and should improve means of assessing teaching effectiveness.

This recommendation is directed to faculty committees, department chairs, deans, academic vice-presidents, presidents, and boards of trustees. We urge them to develop systems for the assessment of teaching effectiveness that will be accepted by faculty and to promulgate criteria for the relationship between teaching effectiveness and rewards.

Although different institutions place different emphases on research, teaching, and service in their personnel decisions, it is clear that the reward structure can act as an incentive—or as a disincentive—for quality instruction. While research and teaching can and should be mutually supportive and complementary, many of our colleges and universities overemphasize research and minimize quality teaching in personnel decisions, and this tradition has potentially damaging effects on student learning and development.

We do not believe that awards for "teacher of the year" and similar symbolic gestures cut to the heart of the matter. These symbols may be important, but they do not institutionalize an incentive system for quality teaching and academic involvement with undergraduates.

We have no universal formulas for the evaluation of college teaching. But we believe that institutions should employ a multidimensional approach that can be used both for faculty evaluation and for feedback to help faculty improve teaching. Toward these ends, college administrators and department chairs should draw upon syllabus and examination analysis, peer review by faculty colleagues who are knowledgeable about good teaching, videotaped classes, external consultants, and

improved student evaluations of teaching.

We believe, however, that the value of student evaluations as a learning device for faculty members is seriously compromised if the same evaluations are also used for personnel decisions. If such evaluations are a required part of the personnel process, it might be useful to include a separate set of student evaluations for the professor's eyes only.

Yet another form of assessment would be to evaluate the commitment of faculty members to teaching through their contributions to the literature on college instruction, student development, and allied topics; to the proceedings of the teaching divisions of learned and professional societies and higher education associations; to instructional materials such as textbooks and software; and to the development of significant courses and curricula.

20.

Student evaluations of academic programs and the learning environment should be conducted regularly. The results should be widely disseminated as a basis for strengthening the quality of undergraduate baccalaureate education.

An institution that regularly seeks its students' views about the quality of their educational experience is manifesting a very different set of values from an institution that makes no such inquiries once the student matriculates. If the only subjects on which we call for student opinion are extracurricular activities, athletics, and food service, we leave the impression that we do not value students as people capable of thinking seriously about their education.

It is our custom to ask student opinion of instruction only with reference to particular courses and instructors and only in the process of faculty evaluation. While the information students provide in these evaluations may be helpful, its purposes are limited. A college needs information and feedback on the shape, sequence, coverage, emphases, texts, and other instructional material of academic programs, as well as on those aspects of the campus environment that contribute to student involvement. We believe that students are one of the best sources of such information.

Furthermore, reflecting on a broad range of courses should prove a valuable learning experience for students. Reflection will require them to integrate their experience, to understand relationships among bodies of knowledge presented in different courses, and to see the connection (or lack of it) between objectives and outcomes. In the process, they will learn the importance of evaluation in any setting.

Implications of The Conditions of Excellence

Thus far in this report, we have offered recommendations to college and university officials and faculty who are responsible for undergraduate curriculum and instruction. In this section, we develop some of the implications of these recommendations for graduate schools and such external agencies as accrediting bodies, state legislatures, and the research community.

Recommendations to Graduate Schools

Not everyone who is admitted to a Ph.D. program intends to teach in a college or university. In fact, in some fields—most notably, in the sciences—a large percentage of students pursue the doctorate in order to enter research careers in private industry and public agencies. We are concerned, however, that the graduate education of those doctoral students who do intend to teach in colleges and universities include some exposure to the requirements of effective undergraduate teaching and learning. The conditions of educational excellence we have discussed in earlier sections of this report require that faculty know how to communicate their subjects in the classroom and how to be effective mentors.

We offer the following two recommendations to improve the education of potential faculty in relation to their service in the education of undergraduates.

21.

To balance the specialization of graduate training in the disciplines, graduate departments should require applicants for admission to present evidence of a broad undergraduate liberal arts education.

While we have emphasized the importance of a liberal arts education for all undergraduates, that education is particularly important for future college teachers. Our concern in this recommendation is with the impact of faculty preparation on student learning. Since the ability to set an idea in a broader context is a key contribution higher education can make to students' intellectual development, we should expect faculty to model this capacity in their interaction with students. The broader contexts are derived from a liberal education.

Of course there is no guarantee that a liberal education will lead to effective undergraduate instruction. But a student is more likely to understand the physics professor who has the background from which to draw analogies between physical and historical forces, for example, than one who does not. Good teaching speaks to the variety of knowledge in students' experience, and a prerequisite of a strong liberal education is the most effective route we know to that variety of knowledge.

There is also a very practical reason for this recommendation. Most graduate students heading for careers in college teaching will wind up in institutions that offer few highly specialized courses. They will be called upon frequently to teach general courses and interdisciplinary or multidisciplinary courses. In order to have an appropriate background from which to draw in teaching those courses, they should have been exposed to the breadth of the liberal arts and sciences as undergraduates.

Lastly, we believe that this required exposure to a wide range of disciplines in the undergraduate years will eventually result in increased collegiality among faculties. The more one understands the intellectual interests, methods, and perspectives of one's colleagues, the better the working relationships.

22.

Graduate deans and department chairs should develop ways of helping prospective faculty in all disciplines (1) to learn about the history, organization, and culture of American higher education and (2) to develop their understanding of teaching and learning.

Just because potential faculty members are students in universities does not mean that they know much about how universities—let alone state colleges or community colleges—work. Thus they may enter teaching positions with false expectations and may be swiftly disillusioned by the realities of organizational life. In addition, because many of them have never reflected on the nature of academic work in their profession, they may not be able to contribute to that profession in constructive ways.

Most colleges and community colleges in the United States are not equipped to provide new faculty with this comprehensive knowledge; hence we believe that it is the responsibility of those who conduct graduate education in our universities (perhaps with the assistance of the Council of Graduate Schools) to take on the task we recommend. It is not necessary that graduate schools introduce new courses on American higher education to meet the spirit of this recommendation, though some may find that strategy appropriate. Universities can be very imaginative in the ways in which they approach this task, and there is a rich literature to guide them.

We recognize that if our suggestions are followed, prospective faculty members may have to pursue their doctorates on a full-time basis since they would have to combine competence in their discipline with knowledge about the culture of higher education and effective undergraduate education. But we are not recommending here that graduate schools and departments abandon their primary commitment to advanced education and research in the disciplines, nor are we recommending that they become teacher training institutions.

This recommendation simply underscores one of the critical conditions of excellence in American higher education: college faculty usually receive only unsupervised on-the-job training in student advising and in the basic teaching crafts of writing syllabi, delivering lectures, designing individual learning experiences, and leading discussions. It is appropriate for new faculty to develop their own teaching styles, but for them to teach well they must come to the job knowing how to determine who is learning, how much they are learning, and how they can be helped to learn more.

Finally, our recommendation is purposively phrased in general terms. Once again, graduate schools can be very creative in the ways they expose future college teachers to learning theories, assessment, and pedagogy. A teaching internship closely supervised by a senior professor, a series of informal seminars and discussion groups, workshops, a self-paced reading list—all of these, and others, are appropriate vehicles. Among the resources available to graduate institutions are the learned societies and professional associations, particularly those with special teaching divisions, journals, or projects.

Recommendations to External Agencies

Many of the barriers to implementing our recommendations on increased involvement, clarified expectations and standards, and assessment and feedback are under the direct control of off-campus agencies. Just as we have called for academic administrators and faculty to modify their behavior and adjust some of their practices in order to establish the conditions of excellence, so it is necessary for accrediting bodies and some state officials to make adjustments in their behaviors, practices, and policies.

23.

State and system-level officials should minimize the intrusions of administrative and fiscal agencies into the *daily* and *routine* operations of public colleges, community colleges, and universities.

Our rationale for this recommendation is that such intrusions ultimately influence the lives—and learning—of students. The message of these intrusions is that the State does not trust a local institution to manage its daily life. The irony is that faculty and administrators respond by investing an inordinate amount of time and energy "getting around" state regulations and practices. Their frustration—and the cynicism that inevitably accompanies it—rubs off on students. An environment dominated by distrust and cynicism is not one in which learning flourishes.

The reports of other commissions that we examined—along with a growing body of literature—have documented the distressing extent of this problem. There is no reason why every purchase order should have to be reviewed and approved by several complex layers in a process so time consuming and complex that sometimes the supplies and equipment necessary for learning arrive after courses are over. There is no reason why guest lecturers have to be masked as "consultants" (or consultants as "lecturers") in order for honoraria to be approved by the State. There is no reason why the State should dictate policies concerning which faculty can travel where to what kinds of professional conferences. These are routine and daily operations that are necessary to the maintenance of a productive and positive environment for teaching and learning and for which administrative flexibility is essential. It is a legitimate responsibility of states to audit institutional practices, to demand evidence of their effectiveness, and to correct abuses. It is quite another matter for them to operate the

institution from a distance on the assumption that faculty and administrators are either incompetent or corrupt.

The integrity and autonomy of colleges are critical to the establishment of an environment conducive to student learning and growth. When bureaucratic practices distort institutional values and drain energy away from teaching and learning, not only does the learning environment suffer but costs to the taxpayer increase. We believe that it is the responsibility of legislators and other state officials to minimize practices that breed distrust and cynicism in public colleges and universities.

24.

Accrediting agencies should hold colleges, community colleges, and universities accountable for clear statements of expectations for student learning, appropriate assessment programs to determine whether those expectations are being met, and systematic efforts to improve learning as a result of those assessments.

Accreditation standards have traditionally measured institutional quality in terms of inputs or resources—endowment per student, percentage of faculty with the doctorate, number of volumes in the library, and the like. These standards have encouraged institutions to heap up resources with little or no attention to how they are used and what results they yield.

In recent years, a movement toward emphasis on results and outcomes in accreditation standards has gained momentum. In relatively few instances, however, is significant attention devoted to student growth and development as indicators of institutional or programmatic excellence. Where attention is given to outcomes, incomplete assessment tends to be the norm. Accreditation standards, for example, are often expressed in terms of how many students are awarded degrees, or what percentage are employed within a year of graduation. There is no demand in these standards for evidence of the degree of proficiency attained by students.

If voluntary accreditation associations themselves do not insist on seeing standards realized in outcomes and assessments, external forces may eventually do so. We prize the self-regulating tradition of higher education too much to allow this to happen.

25.

State officials should establish special and alternative funding for both public and private institutions to encourage efforts that promote student involvement and institutional assessment.

In many ways, this recommendation goes to the heart of a basic contradiction in state-supported higher education: it is funded on the basis of enrollments, not on the grounds of learning. Funding driven by enrollments in a period when enrollments are declining while fixed costs rise spells trouble. The inevitable result is a loss of standards, and student learning suffers the most. As long as states fund higher education according to such actuarial formulas, institutions will devote unwarranted energy to maintaining or increasing enrollments simply to meet costs. They will be able to exert little quality control, nor will they be able to assure students and their families that the credentials awarded are meaningful.

We know that one cannot eliminate formula funding completely. It is a fiscal impossibility. But program improvement funding can inject an element of quality into the system that is not currently apparent. For public institutions, this funding might involve a set-aside percentage of the total state appropriations for public higher education. For private institutions, incentive funding might involve a special state appropriation based on any one of a number of variables the state might choose. A few states have embarked on these efforts, but only for public colleges. We believe that the public benefits derived from the work of private colleges equally warrant this type of incentive.

We stress that these external incentives do not imply competition *among* institutions but rather competition *within* institutions for the best ideas and programs to advance student learning. We also emphasize that these alternative funding mechanisms do not imply external control of academic programs. In the final analysis, improving educational quality in a college depends on the efforts of its own faculty and students.

26.

State legislatures and boards of trustees should reverse the decline in faculty purchasing power by increasing faculty salaries at a rate greater than inflation.

It is because we judge costs in relationship to benefits that we find higher education is underfunded, particularly in the areas of faculty compensation and physical plant and equipment.

There are three basic reasons for directing our recommendation at faculty salaries. First, college faculty have lost 20 percent of their purchasing power over the past 15 years as salary increases failed to keep up with inflation. We have what the economists call a "deferred maintenance problem" on our hands that is as serious as that of allowing a bridge to go unrepaired for decades.

Second, the profession has become less attractive as the deteriorating salary structure takes its toll at the point of entry. Under current conditions, future faculty members will not receive a fair rate of return on their investment in their own education. Doctorate holders have invested as much as or more in their education than have lawyers, engineers, and computer scientists. If potential college instructors do not see a similar rate of return, they may well choose other careers. And at the present moment, the academic profession is losing some of its best people to other professions.

Third, in the context of this report, it is insufficient to suggest that simply raising salaries will automatically focus the faculty's attention on the improvement of undergraduate instruction. If our recommendations—particularly those pertaining to assessment—are adopted, faculty will have to do more than they do at present: to learn more, to stretch further, to devote more of their time and energies to involvement

454-737 0 - 84 - 6

with students. While we have suggested incentives for some of these added activities, we regard others as so central to the purpose of undergraduate education that they should be regarded as normal duties of employment. A majority of faculty members are dedicated and hard workers, but if we are asking them for more work, we simply will have to pay for it.

Recommendations to the Research Community

Research in the field of higher education currently focuses on a diversity of topics ranging from governance and finance to faculty productivity and student development. Higher education scholars represent an increasingly broad spectrum of disciplines, including economics, history, political science, psychology, and sociology. Our values, warning signals, theory of effective learning, and recommendations are based on the fruits of past research. We believe that the stronger the grounds of knowledge, the more successful our future efforts to improve higher education are likely to be.

It is for that reason that we now turn to a discussion of what we need to know in order to guide and monitor the implementation of our recommendations, a prospective research agenda.

There are three important points about the items on this agenda:

- They set general research priorities for federal agencies, private foundations, research organizations, and individual researchers.

- They stress action-oriented research directed toward providing policy analyses and recommendations for the most effective ways to implement improvements in higher education.

INVOLVEMENT IN LEARNING:

Realising the Potential of American Higher Education

Final Report of the Study Group on the Conditions of Excellence in American Higher Education*

EXECUTIVE SUMMARY

Americans have come to expect that our colleges, community colleges, and universities will do everything from extending the frontiers of the universe to providing cultural events for local communities. As colleges have tried to meet all our expectations, the quality of undergraduate education and liberal learning--their primary missions--has inevitably eroded.

The message of INVOLVEMENT IN LEARNING is that American higher education needs to refocus its attention on student learning in order to realize its potential. Our colleges, community colleges and universities form a great national resource that can do better. Access to a college education will mean little to millions of new students if colleges neglect their most basic roles and responsibilities.

There is growing evidence, however, that faculty and administrators across the entire range of our colleges, community colleges, and universities want to know how to do better. INVOLVEMENT IN LEARNING may thus arrive at a propitious time.

WHY THIS REPORT? WHY NOW?

Over the past two years, the Nation has been engaged in a major debate on the current state and future direction of American education. But it has been a very paradoxical debate precisely because it has excluded any consideration of the quality of higher education. In the process of the debate, we have learned that our educational system is all of one piece,

*Sponsored by the National Institute of Education.

BEST COPY AVAILABLE

and that higher education exerts profound influences on elementary and secondary schools. So if higher education expects less than "higher," the effects are felt throughout American education.

INVOLVEMENT IN LEARNING places undergraduate education squarely on the stage of the national debate, turns on the spotlight, and offers strong guidance for getting better.

If we do not include higher education in our current national efforts of reform, we will have a tragic paradox on our hands in a few years: students will be better prepared for our colleges, but our colleges will not be prepared for them!

THE WARNING SIGNALS

After a period of remarkably successful adaptation to dramatic growth and change, there are signs that all is not well in the house of higher education. There are warning signals we must heed in order to do better:

- o Only half of those who enter college with the intention of receiving the bachelor's degree actually succeed in fulfilling their goal;
- o The test scores of college graduates applying to graduate and professional schools have declined, some by very substantial amounts;
- o More students are pursuing degrees in increasingly narrow fields, avoiding the liberal arts and sciences, avoiding subjects that challenge their verbal skills, and moving more and more into professional and vocational programs on the undergraduate level;
- o The quality of the physical plant and equipment of our institutions has declined, and faculty salaries have not kept up with inflation. Teaching and learning inevitably suffer; and enrollment-driven funding formulas make it very hard to "catch up" on either physical or human resources when enrollments are stable or declining.

BEST COPY AVAILABLE

One need not be exhaustive in listing such indicators. But there are two other trends that deeply concern us and that help explain the erosion we see.

The first is the tendency of our colleges to measure quality in terms of resources and "inputs," and not in terms of what students learn during their college years. Acquiring more computers and raising admission standards does not mean that a college will offer a better education. INVOLVEMENT IN LEARNING urges all our institutions of higher education to pay much greater attention to the learning of the students they graduate as the true measure of effectiveness. If American higher education wants to do better, there is no better place to start.

The second is the tendency of our colleges to ignore the findings of research concerning what makes for effective teaching and learning in undergraduate education. Given the fact that most of this research is done by college and university faculty, we find this ignorance a great irony, indeed. INVOLVEMENT IN LEARNING offers an analysis and recommendations that are grounded in the knowledge base, and points the way for colleges, community colleges and universities to use this knowledge for improvement.

A THEORY FOR ACTION

INVOLVEMENT IN LEARNING presents a plan for action that is derived from research. Much has been learned over the past two decades about how to increase student learning in higher education. We now know that almost every policy and practice on a campus, from budgets to bulletin boards, can have an impact, provided that they:

(1) increase STUDENT INVOLVEMENT in academic learning;
(2) insure that both students and institutions share HIGH EXPECTATIONS for what can be accomplished and CLEAR STANDARDS for college-level academic work;
(3) include provisions for ASSESSMENTS, with information fed back to all participants in order to improve their performance.

BEST COPY AVAILABLE

We spend some time discussing this theory. The key term is "involvement." Involvement refers not merely to the time, but also to the energy and quality of effort students invest in academic learning. Students learn more and better by being active participants, not passive spectators. So the question is how the policies and practices of colleges can maximize this critical engagement with knowledge. If the policies and practices increase involvement, students will learn more.

But "Involvement" cannot stand alone. For the degrees awarded by colleges to be meaningful, students must be involved in something we all recognize as college-level learning. And the more public our expectations for college-level learning, the better the chances that student performance will rise to the challenge. INVOLVEMENT IN LEARNING discusses two categories of expectations: requirements (the "what" of higher education) and standards (the "how well" of academic achievement). The Report argues that if faculty and students come to share high expectations, both involvement and learning will increase.

There is a third element in this theory. We will never know whether our expectations have been fulfilled and students will never know whether their involvement is paying off unless we regularly ASSESS learning and feed back the information from assessment to students and faculty.

INVOLVEMENT IN LEARNING does not advocate measuring everything that moves. Rather, it asks colleges to acknowledge that if they are serious about the business of undergraduate education, they ought to be able to demonstrate that something happens to students between matriculation and graduation that is the direct result of their efforts.

More importantly, INVOLVEMENT IN LEARNING argues that assessment is an organic part of the learning process itself, not a sorting and screening device. Students respond positively to information on their performance in relation to institutional expectations, and are more likely to increase their involvement as a result.

BEST COPY AVAILABLE

ACTION BASED ON THE THEORY

INVOLVEMENT IN LEARNING offers 27 recommendations for realizing the full potential of undergraduate education in the Nation's colleges, community colleges and universities. The first 20 of these are based--directly and indirectly--on both the theory and the "warning signals."

WHAT CAN WE DO TO INCREASE STUDENT INVOLVEMENT? The Report recommends that we concentrate resources on the first two years of college ("frontloading"), a period in which students seem most vulnerable and least supported by the learning environment. In addition, faculty should adopt more active modes of teaching, and new technologies should be used to increase the interaction between students and faculty, while programs of guidance and academic advisement should be restructured to involve students throughout their undergraduate years. We recommend means of increasing student involvement through academically oriented student activities, including performance groups, publications and debate teams--with particular attention in all of these to the participation of part-time and commuter students. "Learning communities," organized around special intellectual interests, are also recommended; and we advocate the consolidation of as many part-time faculty positions as possible into full-time positions because part-timers are simply not on campus enough to influence students in important ways.

WHAT CAN WE DO TO ACHIEVE HIGH EXPECTATIONS AND STANDARDS? We can start by stating with clarity what each college expects of its graduates in the way of learning outcomes, and then "warranty" the degrees awarded with proficiency examinations in both the student's major and in liberal education. We should require at least two years of arts and sciences courses for all bachelor's degrees, even though this will extend undergraduate professional programs in fields such as business administration and teacher education beyond four years. But requiring more time in arts and sciences courses is not enough: those courses should be reformulated to promote the development of techniques of analysis, synthesis, and problem solving and should emphasize the integration of knowledge. Remedial courses are necessary to prepare some students to undertake college-level learning; students in remedial

BEST COPY AVAILABLE

programs should carry limited course loads, and will thus need more time to meet the standards of performance required for the college degree.

Expectations and standards apply to faculty and institutional performance as well: faculty should be encouraged to engage in scholarship and research in ways that will benefit students, while institutions can and should be run in ways that are consistent with the principles of honesty, justice, and respect for others that are the necessary values of community.

WHAT CAN WE DO TO UTILIZE ASSESSMENT FOR THE IMPROVEMENT OF HIGHER EDUCATION? In an institution committed to excellence, information on student progress should guide and inform decisions made by students, by faculty, and by the institution itself. We recommend that colleges, community colleges and universities be far more systematic in the ways in which they go about assessment, that faculty participation in assessment programs is essential, that the assessment of teaching effectiveness should be improved, and that student evaluations of academic programs and the learning environment should be conducted regularly. INVOLVEMENT IN LEARNING points out that all these assessments can be developed in a comprehensive, economical and consistent manner.

IMPLICATIONS FOR OTHERS

Most of the recommendations based on the theory set forward in INVOLVEMENT IN LEARNING are addressed to college faculty and administrators. But there are four other groups that are critical to the challenge of realizing the full potential of American higher education, and without whose full participation the conditions of excellence will not be met. We cannot get better without them.

We believe that GRADUATE SCHOOLS should take account of the ideas presented in this Report by requiring prospective college professors to present evidence of a broad undergraduate liberal arts education, and by assuming the responsibility for orienting future college professors to

BEST COPY AVAILABLE

the history, organization and culture of American higher education as well as to theories and practices of college-level teaching and assessment.

Many EXTERNAL AGENCIES need to change as well. State officials should minimize their intrusions into the daily and routine operations of campuses, since bureaucratic practices drain energy away from teaching and learning. At the same time, accrediting agencies should hold our colleges responsible for developing the more systematic assessments of student learning we are recommending and should focus their standards on direct measures of outcomes, not on indirect indicators or resources. State legislatures--along with college boards of trustees--should reverse the decline in faculty purchasing power and loosen the knot that ties funding to enrollments by increasing the percentage of college revenues based on efforts to improve undergraduate education.

The RESEARCH COMMUNITY is critical to the improvements advocated in INVOLVEMENT IN LEARNING. The Study Group recommends a general research agenda focused on student learning outcomes and the factors that best contribute to increased achievement. The stronger the grounds of knowledge, the more successful all our efforts will be.

Most importantly, STUDENTS themselves need to begin to ask questions about the sum total of their education, to find ways to devote more time to undergraduate learning, to enhance the quality of their effort, to contribute in constructive ways to campus life (drawing on their learning in the process), to cut down (where feasible) on the number of hours they work during the academic year, and to insist that their colleges provide them with opportunities for independent study, internships, and integration of knowledge. INVOLVEMENT IN LEARNING suggests some litmus tests students can use to judge the adequacy of their education at different points during their college careers, and urges them to participate in assessments and program evaluations. Students, after all, are the most important source of information and evidence as to how well our colleges, community colleges and universities are doing their job.

BEST COPY AVAILABLE

CONCLUSIONS. There are a number of themes that emerge from INVOLVEMENT IN LEARNING. First, while we are deeply concerned about the current state of higher education, there is a tremendous reservoir of energy and commitment upon which our colleges, community colleges and universities can draw for self-improvement. Higher education has both the tools and the disposition for renewal. Secondly, all participants in higher education must become more involved in the teaching and learning process at the undergraduate level, and in using the tools and knowledge to provide a more productive environment for learning. Third, that undergraduate education is best conducted as a joint enterprise; that a community of learners lies at the core of higher education and must be strengthened. And lastly, if only we would start by focusing principally on what students learn between matriculation and graduation, we will inevitably do better.

BEST COPY AVAILABLE

UNITED STATES
DEPARTMENT OF EDUCATION NEWS

October 22, 1984

STATEMENT
BY

SECRETARY OF EDUCATION

T. H. BELL

Involvement In Learning:
Realizing The Potential Of American Higher Education

Good morning. We are pleased to meet the press and representatives of academe here at George Washington University to release a major report on higher education in the United States. Titled Involvement in Learning: Realizing the Potential of American Higher Education, the report makes 27 recommendations designed to enhance the quality of education and the effectiveness of the student learning process.

The report is the product of a seven member study group appointed in September of 1983 by Dr. Manuel Justiz, Director of the National Institute of Education. Unlike the National Commission on Excellence in Education, the study group did not hold hearings or take testimony. Recognized as experts in their field, the group was asked to function as a seminar to review the data available, to study previously published papers, testimony, and reports and to work together to publish a constructively critical review of the condition of undergraduate education and to make recommendations for improvement. The seven members are scholars who have conducted research and have written extensively on higher education.

-MORE-

BEST COPY AVAILABLE

Despite the fact that I fully concur in the statement in the report that says that American higher education is "by far the largest, most complex, and most advanced in the world," I was pleased to support the NIE recommendation that we convene a study group to prepare a series of recommendations on how to meet some deficiencies that are beginning to surface. We need to act promptly to maintain the traditional excellence in our higher education system. Some "warning signs and trouble spots" identified in the report will require the prompt attention of the higher education community if we are to avoid some of the difficulties that have affected our elementary and secondary schools. By responding promptly to these needs for reform in higher education we will avoid a major crisis that will erode public confidence and support in subsequent years.

Following are some specific highlights of the report:

- Only about half of those who enter college with the intention of receiving a bachelor's degree eventually do so.
- Research, as well as common sense, indicate that those entering freshmen that have the best academic preparation are the least likely to drop out. Of course those colleges that require a high level of academic preparation of all entering freshmen, have the lower dropout rates. This criticism applies least to these institutions and most to those with low admissions standards.

-MORE-

BEST COPY AVAILABLE

- o The test scores of college graduates applying to graduate and professional schools have declined, some by very substantial amounts.
- o More students are pursuing degrees in increasingly narrow fields, avoiding the liberal arts and sciences, avoiding subjects that challenge their verbal skills, and moving more and more into professional and vocational programs on the undergraduate level.
- o The quality of the physical plant and equipment of our institutions has declined, and faculty salaries have not kept up with the disastrous inflation that preceded the Reagan Administration.

The plan for action presented in the Study Group Report is derived from research and a resulting theoretical base which says:

- o Student involvement in learning must increase.
- o Clear expectations and high standards for what can be accomplished must be shared by students and institutions.
- o Evaluation and assessment must be an integral part of academic learning.

The report offers 27 recommendations for realizing the full potential of undergraduate education in the Nation's colleges, community colleges and universities. Fully 20 of the recommendations are directed to college faculty and administrators. The other seven are directed to graduate school deans and faculty, State legislatures and State officials, accrediting agencies, the research community and students.

BEST COPY AVAILABLE

-MORE-

I conclude by emphasizing that the nation is being served by a higher education system that is the envy of the world. It has taken many years to build our magnificent system that serves over 12 million students, including about one million who came here from abroad to study. Because we all take great pride in this system we should lend encouragement and assistance in meeting the deficiencies that are now becoming increasingly apparent. We must have a rigorous, dynamic, and diversified system of public and private institutions. To keep and improve what has served us so well in the past we must give impetus to renewal. It is my hope that this report will generate debate, rebuttal, and new ideas. To this end, we plan to widely disseminate the report over the next few months.

# # #

BEST COPY AVAILABLE

UNITED STATES
DEPARTMENT OF EDUCATION NEWS

FOR IMMEDIATE RELEASE.
Monday, October 22, 1984

Duncan Helmrich -- 202-245-8564

U.S. Secretary of Education T. H. Bell today released a study on higher education that calls for major reforms in the way U.S. colleges and universities educate their students.

The year-long study, carried out by a seven-member panel of prominent educators, concludes that student learning should be increased, the dropout rate needs to be reduced and the integrity of the baccalaureate degree must be restored.

The panel's report, Involvement in Learning, was sponsored by the Education Department's National Institute of Education (NIE). Secretary Bell said the report "adds another major thrust to the wave of reform we began in April of 1983 with the publication of A Nation at Risk, which warned that our educational foundations are being eroded by a rising tide of mediocrity."

The report of the Study Group on the Conditions of Excellence in American Higher Education revealed some warning signals and trouble spots in higher education, the most serious of which is the failure of institutions to monitor and document the learning of students they graduate. Among the other signals are:

- Of the academically proficient high school seniors, one of eight opts against going on to college.
- Half the students who start college fail to finish.
- An increasingly large number of students bypass or drop out of the traditional arts and science fields.
- The buildings and equipment of American colleges and universities are rapidly deteriorating.

-MORE-

- Fourteen out of 50 state university systems have recently raised their requirements and standards -- but only for purposes of admission, not for purposes of graduation..

- The number of entering college freshmen who attend to pursue careers as college professors dropped from 1.8 percent in 1966 to 0.2 percent in 1982, an 89 percent decline.

Since the college curriculum has become excessively vocational, the report noted, "the baccalaureate degree has lost its potential to foster the shared values and knowledge that bind us together as a society."

The report deplored the proliferation of narrow, specialized instructional programs that fragment and limit knowledge. It said accreditation standards for undergraduate pre-professional programs often stand as barriers to the broad understanding normally associated with liberal learning.

The study also showed that highly involved students devote considerable energy to studying, spend a great deal of time on campus, participate actively in student organizations and interact frequently with faculty members and peers. It said policies on class schedules, parking regulations, and cultural events, among others, affect the way students use their time.

Students' expectations for what lies ahead after college also are a factor in their level of achievement, as are current periodic assessment and feedback.

The study group's 27 recommendations address programs of study, college environments, the preparation of faculty for their teaching roles, accreditation, and assessment of student achievement. Among the major recommendations are these:

- All baccalaureate recipients should have at least two full years of liberal education. In most professional fields, this may require extending undergraduate programs such as engineering, architecture, business administration and teaching, beyond the usual four years.

- Community colleges, colleges and universities must supplement the credit system with proficiency assessments in liberal education and the student's major as a condition of awarding degrees.

- Student evaluations of academic programs and the learning environment should be conducted on a regular basis. The results should be widely disseminated as a basis for strengthening the quality of undergraduate baccalaureate education.

- State officials should establish special funding for both public and private institutions to encourage student involvement in institutional assessment.

- State legislatures and boards of trustees should reverse the decline in faculty purchasing power by increasing faculty salaries at a rate greater than inflation.

In discussing undergraduate professional degree programs, such as business administration, nursing, and engineering, the report noted, "Students are not likely to accumulate in four years both the generalized and special knowledge necessary for first-rate performance as professionals."

To help prevent dropouts or failures by first and second-year students, colleges are asked to guarantee that first-year students have access to a stable body of well-trained advisors including faculty, administrators and peers.

Copies of Involvement in Learning: Realizing the Potential of American Higher Education, (Stock #065-000-00213-2) are available for $4.50 from the Superintendents of Documents, Government Printing Office, Washington, D.C. 20402

# # #

NOTE TO EDITORS: Attached is a list giving the names and affiliations of the study group members.

Members of the Study Group on the
Conditions of Excellence in American Higher Education

CHAIRMAN: Kenneth P. Mortimer, executive assistant to the president for university affairs and a professor of higher education and public administration of the Pennsylvania State University.

Alexander W. Astin, psychologist, a professor of higher education and director of the Higher Education Research Institute, University of California at Los Angeles. Formerly director of research for both the American Council on Education and the National Merit Scholarship Corporation.

J. Herman Blake, sociologist, recently appointed president of Tougaloo College, Tougaloo, Miss. Founding provost of Oakes College, University of California at Santa Cruz, which he headed for 12 years while serving on the sociology faculty.

Howard R. Bowen, R. Stanton Avery Professor of Economics and Education, Claremont Graduate School, Claremont, Calif. Formerly president of Grinnell College, the University of Iowa and Claremont University Center.

Zelda F. Gamson, sociologist, a professor at the Center for the Study of Higher Education, University of Michigan, who also holds an appointment at the College of Public and Community Service, University of Massachusetts-Boston.

Harold Hodgkinson, senior fellow at the Institute for Educational Leadership, Washington, D.C. Previously director of the Professional Institute, American Management Association; director of the National Institute of Education; and dean of Bard College.

Barbara A. Lee, assistant professor at the Institute of Management and Labor Relations, Rutgers University. Formerly director of data trends analysis, Carnegie Foundation for the Advancement of Teaching; and a policy analyst for higher education programs, U.S. Department of Education.

EX OFFICIO: Dr. Norman Francis, president, Xavier University, New Orleans, La., and Dr. Edward Elemendorf, assistant secretary for postsecondary education, U.S. Department of Education.

# # #

UNITED STATES
DEPARTMENT OF EDUCATION NEWS

FACT SHEET

INVOLVEMENT IN LEARNING: REALIZING THE POTENTIAL OF AMERICAN HIGHER EDUCATION

The Study Group

The Study Group on the Conditions of Excellence in American Higher Education was formed in September, 1983 as a follow up to the work of the National Commission on Excellence in Education. The group was funded by the National Institute of Education (NIE).

The seven Study Group members were appointed by NIE Director, Dr. Manuel Justiz. Members were selected for their different areas of expertise in higher education. The group was chaired by Dr. Kenneth Mortimer, Pennsylvania State University.

The Study Group was not a commission and, therefore, did not hold public hearings or solicit testimony. The members reviewed previously gathered papers, testimony, and reports and, during their seven meetings over the year, functioned as a seminar.

Scope of the Report

Recent reports have focused the Nation's attention on elementary and secondary schools. Involvement In Learning turns the spotlight on our colleges, community colleges, and universities.

The American system of higher education is the largest and most diverse in the world:

It encompasses nearly 3300 institutions of all types and sizes,
It enrolls over 12 million students,
It employs nearly 2 million workers, and
It accounts for roughly 3% of the Gross National Product.

Of our twelve million students:

More than 50% are women,
Approximately 17% are minorities,
Approximately 45% are over the age of 25, and
Forty-two percent attend part time.

America's higher education system has adapted to dramatic growth and change in recent years. Few institutions in our society could have been subjected to such pressures and still have contributed as much to individuals and the Nation. Despite this success, the report cited "warning signs" in America's higher education system.

Only half of those who enter college with the intention of receiving a bachelor's degree eventually do so.

The test scores of college graduates applying to graduate and professional schools have declined, some by very substantial amounts.

More students are pursuing degrees in increasingly narrow fields, avoiding the liberal arts and sciences, avoiding subjects that challenge their verbal skills, and moving more and more into professional and vocational programs on the undergraduate level.

The quality of the physical plant and equipment of our institutions has declined, and faculty salaries have not kept up with inflation.

Much of the report speaks to the tendency of colleges to measure quality in terms of resources and "inputs", and not in terms of what students learn during their college years. Involvement In Learning urges all institutions of higher education to pay more attention to the learning of the students they graduate as the true measure of effectiveness. Involvement In Learning recommends colleges, community colleges and universities use the findings of research to improve teaching and learning.

The plan for action presented in the Study Group Report is derived from research and a resulting theoretical base which says:

Student involvement in learning must increase.

Clear expectations and high standards for what can be accomplished must be shared by students and institutions.

Evaluation and assessment must be an integral part of academic learning.

Recommendations

Involvement In Learning offers 27 recommendations for realizing the full potential of undergraduate education in the Nation's colleges, community colleges and universities. The first twenty recommendations directly respond to the theory spelled out above.

Recommendations to increase student involvement

To increase student involvement, Involvement In Learning recommends concentrating resources on the first two years of college ("frontloading"), a period when students seem most vulnerable and least supported by the learning environment.

Faculty should adopt more active modes of teaching and new technologies should be used to increase the interaction between students and faculty. Programs of guidance and academic advisement should be restructured to involve students throughout the undergraduate years.

Student involvement should be increased through academically oriented student activities, with particular attention to the participation of part-time and commuter students. "Learning communities", organized around special intellectual interests are recommended.

The Study Group advocates the consolidation of as many part-time faculty positions as possible into full-time positions as a way to increase faculty involvement.

Recommendations to achieve high expectations and standards

To heighten expectations and raise standards, Involvement In Learning recommends each college clearly define, and publicly state, the learning outcomes expected of its graduates. The Study Group further recommends proficiency examinations in both the student's major and in liberal education as a "warranty" on the degree awarded.

Two years of arts and sciences courses should be required for all bachelor's degrees, even if this extends undergraduate professional programs in fields such as business administration and teacher education beyond four years. Arts and sciences courses should be reformulated to promote the development of techniques of analysis, synthesis, problem solving, and should emphasize the integration of knowledge.

Students in remedial programs should carry limited course loads and will, thus, need more time to meet the standards of performance required for the college degree.

Faculty should be encouraged to engage in scholarship and research in ways which will benefit students and institutions should be run in ways that are consistent values of honesty, justice, and respect for others.

Recommendations to utilize assessment for the improvement of higher education

Information on student progress should guide and inform decisions made by students, faculty, and administration. Colleges, community colleges and universities should be far more systematic in the ways they go about assessment. Faculty participation in assessment is essential. The assessment of teaching effectiveness should be improved. Student evaluations of academic programs and the learning environment should be conducted regularly. Involvement In Learning recommends these assessments be developed in a comprehensive, economical, and consistent manner.

Other recommendations

All the above recommendations are directed to college faculty and administrators. Involvement In Learning directs recommendations to four other groups which the Study Group feels are critical to the realizing the full potential of America's higher education system.

Graduate schools should require prospective college professors to present evidence of a broad undergraduate liberal arts education and should assume the responsibility for orienting future college professors to the history, organization and culture of American higher education as well as the theories and practices of college level teaching and assessment.

State officials should minimize their intrusions into the daily and routine operations of public higher education institutions.

Accrediting agencies should hold colleges responsible for developing more systematic assessments of student learning and should focus their standards on direct measures of outcomes, not on indirect indicators or resources.

State legislatures, and college boards of trustees, should reverse the decline in faculty purchasing power.

The research community should focus on student learning outcomes and the factors that best contribute to increased achievement.

Students need to begin to ask questions about the quality of their education and need to participate in assessment and evaluation of programs.

# # #

10/22/84

- They express our confidence that the precise details of research projects (design and development) will be more persuasive if left to individual researchers and research organizations than if dictated by an external body such as ours.

In developing these research priorities, we first reflected on past research and on the commissioned papers, studies, testimony, and other background materials on higher education of the various commissions that have reported to the American people over the past few years. Next we developed a blueprint for improving the quality of undergraduate baccalaureate education, and only then did we consider what research priorities need to be supported as this blueprint is implemented.

In short, while there are many interesting lines of research that could be pursued, the priorities become clearer when one is committed to implementing a specific set of recommendations for improvement.

The Study Group is keenly aware of the importance of basic research in improving our understanding of human affairs and for advancing the state of scientific knowledge about how people and organizations learn. We urge further exploration of this theoretical base upon which our recommendations are grounded. Our immediate task is to develop a more action-oriented research program, one that will yield better analyses and more information about implementation. We already know a great deal about what needs to be done, but we seem to lack the ability to implement effectively.

We are confident that, within the context of the following priorities, the higher education research community will design useful and important projects and that the traditional consultative and competitive processes will channel their creative energies. These priorities are governed by a single recommendation.

27.

Federal and state agencies, private foundations, colleges and universities, research organizations, and researchers concerned with higher education should focus their funding strategies and research activities on how to facilitate greater student learning and development.

We need more information about what students learn in college, how they grow, and ways that learning and growth can best be assessed. In this report we employ a theory of effective learning that emphasizes this fundamental concern about what happens to students when they participate in baccalaureate education. Inherent in this theory are some hypotheses that call for further exploration, for example, that information and feedback enhance college student involvement and lead to greater student learning and development. These hypotheses need further testing.

A research agenda focused on student outcomes requires that some of the following questions be addressed:

1. What curricular approaches, teaching and learning environments, and practices are associated with the various dimensions of student learning and growth? Are certain approaches more effective than others with students of differing ability levels and learning styles?

Here we refer to environmental characteristics, curricular structures, sequences and requirements, pedagogy, academic advising, student peer groups, and changing student expectations. Our recommendations support the importance we attach to these matters. There have been no systematic comparisons of these approaches and there is no question that higher education needs better indicators of the relationships between environmental characteristics and the persistence, growth, and achievement of different groups of students (e.g., adults, minorities).

One important undertaking in this general area would be an analysis of college student transcripts in relationship to learning outcomes. The background for such an undertaking is currently being prepared in the gathering and coding of college transcripts from those students in the "High School and Beyond" sample (Class of 1980) who have attended postsecondary institutions. Subsequent research could identify the patterns of course taking in college that led to the greatest increases in student learning in different areas.

2. What forms of assessment and feedback are associated with greater student learning and development?

We are concerned that our recommendations on assessment be interpreted as supportive of maximizing student learning and development rather than as simple-minded attempts to measure everything that moves. In recent years, a number of colleges have established assessment programs that simultaneously involve faculty development and measures of gains in student learning. A carefully selected set of case studies, for example, might help us determine just how successful these experiments have been in terms of their intended objectives.

When one talks about "forms of assessment," the reference is usually to tests and the uses we make of them. Research is also needed on the educational impact of different types of tests and score-reporting systems and on the uses of those tests and scores.

3. What are the most effective organizational strategies, policies, and processes available to administrators as they seek to maximize student learning and development and simultaneously to utilize their resources more efficiently?

This question reflects our conclusion that the process of implementing improvements is crucial to student outcomes. Researchers who focus on this question might consider exploring some of its allied concerns. For example, in what ways can major barriers to improvement—costs, faculty

resistance, lack of administrative incentives—be overcome? What are the relative impacts of different kinds of incentives in encouraging faculty, administrators, legislators, and state and federal agencies to concentrate on promoting growth in student learning? What are the different effects of various patterns of governance, leadership, and organizational structures on faculty commitment to teaching, hence (ultimately) on student learning and development?

4. What is the relationship between costs and the various dimensions of student learning and development?

In examining materials and cases, we found that some low-cost institutions seem to be providing highly effective education and that some relatively affluent institutions seem to be less effective. Since we define effectiveness in terms of student learning and since we specify some of the dimensions along which learning ought to occur, it is time to analyze the costs of enhancing learning along each of these dimensions. One way of going about the task might be to consider the interactive effects of various types of student financial assistance on both short-range and long-term outcomes of postsecondary education.

* * *

These are but a few examples of research topics that one can generate once a focus on student outcomes is adopted. The concepts we have emphasized in our report—involvement, expectations and standards, assessment and feedback—should provide the framework within which individual research programs can be developed and specific projects judged. As faculty members from the various disciplines work together in designing and implementing assessment programs (see Recommendation 16), they may want to include these activities in their own research agenda. Precisely how this agenda can be implemented constitutes a great challenge to the creative talents of the Nation's research community and to the willingness of funding agencies, foundations, and associations to assist in producing this critical knowledge.

To Students

We could offer hundreds of recommendations to college officials and faculty on the best ways to increase student learning, and they could implement all of our suggestions—all to no avail if students themselves do not respond. It is your involvement, your commitment, and your energy that will determine the extent to which the Nation achieves excellence in undergraduate education.

For this reason, we end this report with some advice to you, based on our thoughts on effective learning and our recommendations to faculty members, administrators, and other policymakers. This advice is not exhaustive but suggests the type of actions you need to take to make the most of your undergraduate opportunities.

Our first suggestions concern your involvement—the most critical of the conditions for excellence discussed in this report. The following steps strike us as the most important that you can take:

- Seek out a faculty member who can be an intellectual mentor, an adviser, and a friend. If that person is engaged in research or public service projects, get yourself involved in one or more of them.

- Take particular advantage of the advising and counseling services during your first two college years. Insist that faculty and other advisors be accessible and that their advice evidences comprehensive knowledge of your abilities, needs, and goals.

- Make every effort to involve yourself in some campus activity, club, or organization that will require you to draw upon what you have learned in your course work.

- Give some thought to how you can *contribute* to the life of the campus. Your college experience provides a wide variety of opportunities to make such a contribution through peer counseling and tutoring, student government, service organizations, and other student activities. If you are an older student, recognize that you have unique contributions to make to the learning environment. You bring an experience and a quality of mature discernment to collegiate life that can be used creatively in your institution.

- Try to attend college full time for at least part of your student career even if you are currently employed full time and/or have family responsibilities. You may be eligible for a variety of financial benefits from your employer or from the government that will enable you to do so. We believe that the experience of being a full-time student entails greater gains than costs.

- Do not work simply to enhance your economic life-style while you are in college. If you are a full-time student and have to work to support a family or to pay tuition, fees, and other college costs, find a job on campus. If you cannot find a job on campus, look for one nearby, in a business or establishment frequented by students. Try to limit your employment to no more than 15 to 20 hours per week.

- Make sure that you take at least one independent study course and one internship during your college career, and that these experiences involve research and the opportunity to apply theory to problems in the world beyond the campus. Insist that your institution provide these opportunities.

We value strongly breadth and integration in higher education, particularly because of our deep concern for the relevance of college to your life's work—and not just to your first job. The data indicate that today's workers will probably change jobs five times before they are 40 and that they will change careers three times before they retire. Colleges and universities treat you as responsible adult consumers, but their undergraduate curriculum is not a supermarket where generic brands and cost per unit are the best guides to your life's work. Here are some tests that you can use at certain points in your college careers to judge the adequacy of your education, and—depending on the results—some steps you should take to assure that your program meets the high expectations inherent in these tests:

- At the end of your sophomore year, pick up a recent issue of one of the comprehensive science magazines, such as *Scientific American*, and see if you can explain to some friends not only the theories, methods, and conclusions covered in the major articles but also the implications of the findings for the quality of human life, health, behavior, the economy, the environment—and hence—public policy and the law. If you cannot offer that explanation, use your subsequent electives to advance your knowledge to the point at which you can.

- At the beginning of your junior year of college, pick up a foreign newspaper—preferably one in a language you have studied—and see if you can recount to a friend the world, national, and cultural issues presented in that paper. If you cannot do so, use your discretionary time during the next two years to master the language and the cultural point of view that frames those issues.

- In the middle of your junior year of college, see if you can describe a high quality analysis of a particular set of data, texts, or artifacts in your major field. Then describe a high quality synthesis of information and

theory from your major and minor fields. If you cannot perform either task, and if you cannot describe the criteria for "high quality," demand that your college give you the opportunity to reflect on and integrate your previous learning during your senior year.

The strong implication of this advice is that you should use your elective courses to explore academic fields in which your knowledge is limited and to integrate what you know from various disciplines. Do not use your electives to develop nonacademic skills that you can learn just as easily from peers and family or on your own. It is a waste of your credits, time, and money to take nonacademic courses, and it cheapens the degree for everyone.

Our last suggestion goes beyond issues of involvement and expectations to your role in the assessment of higher education. You are not only the primary beneficiaries of higher education, you are also the most important source of information and evidence as to how well colleges and universities are doing their job. They cannot easily improve their programs unless you participate seriously in assessments and offer advice based on careful reflection. Thus we suggest that you:

- Insist on participating in regular evaluations of your institution's program offerings and environments. When you do, think critically about the textbooks used, course sequences, instructional methods, and ways to make the environment more attractive and responsive to your needs for involvement. Don't merely criticize. Suggest alternatives and defend them. Would three books, each taking a different approach to a subject or issue, have been better than the single textbook? Would a field research project have been better than one conducted in a laboratory? Faculty and administrators will listen very seriously if you ask and answer such questions.

* * *

Over the next 15 years and into the next century, our Nation will require citizens who have learned how to learn—who can identify, organize, and use all of the learning resources at their disposal. It will depend on creative people who can synthesize and reshape information and who can analyze problems from many different perspectives. And it will require people who will share their knowledge and intellectual abilities in family, community, and national life.

Becoming one of those people will entail risks on your part. In all of our recommendations we have urged you to get as involved as you can in your own education—and getting involved is a risky business. Accept the challenge. The rewards are worth it.

Appendix A: Summary of The Interim Report of The Study Group

The interim report of the Study Group, *The Progress of an Agenda**, was presented to Dr. Manuel Justiz, Director of the National Institute of Education, in May of 1984. This report fulfilled a number of responsibilities with which the Study Group was charged, served as a way to help us organize our final report, and offered us the opportunity to make recommendations to NIE and other federal agencies concerning data and information on postsecondary education in the United States.

The Progress of an Agenda first presented a general assessment of the archives and background materials on higher education assembled by the various national commissions that reported to the American public over the previous year. Specifically, it discussed the reports of:

- The National Commission on Higher Education Issues (American Council on Education), *To Strengthen Quality in Higher Education*;
- The Business/Higher Education Forum, *America's Competitive Challenge*;
- The National Commission on Student Financial Assistance, *Signs of Trouble and Erosion* (a report concentrating on graduate education); and

The Progress of an Agenda: A First Report from the Study Group on the Conditions of Excellence in American Higher Education. ERIC Document Reproduction Service, ED 244-577, 27 pp., May 1984.

- The National Commission on Excellence in Education, *A Nation at Risk.*

The discussions in the interim report do not constitute—nor were they intended to constitute—a rebuttal or critique of the *reports* of these groups. Rather, and in keeping with our assignment, they are analyses and assessments of the *background materials* assembled by these groups in the course of their work. Furthermore, we recognized that none of these groups set out to review and/or synthesize the existing literature on higher education, nor were they charged to do so. Thus, we did not look at the background materials in terms of what was missing as much as we used them to organize our own thoughts on higher education.

Of the documents examined, the record and archives of the National Commission on Excellence in Education were most voluminous, and our principal focus was on that record. In approaching that material in ways that would help us identify the "conditions of excellence" in American higher education, we chose four traditional dimensions of analysis in higher education: (1) student clientele; (2) programs and learning environments of institutions; (3) "providers" of undergraduate education; and (4) the external influences on higher education. We then considered how the Commission's materials, including some of its papers on elementary and secondary education, were related to each of those dimensions. In the process, we made recommendations for specific studies and projects that would be appropriate extensions of the productive lines of inquiry established by the Commission.

Our recommendations (principally to NIE and other federal agencies) concerning educational data focused on the problem of the inconsistencies, noncomparabilities, and outright gaps in the various data series available. We pointed out that such problems are damaging to the accuracy and timeliness of institutional and state-level planning and monitoring efforts and to the appropriateness of public policies promulgated on the basis of misleading, incomplete, or contradictory information. We thus recommended that:

1. The Department of Education solicit advice from a broad cross section of the research community and other informed parties to assess the quality of current educational data, to suggest the kinds of data series that ought to be maintained, to reconsider the processes by which such data are collected in many agencies, and to recommend reporting capacities that would be useful to the educational community at large.

2. NIE take a leadership role in the cooperative development of a systematic and continuing data base for *noncollegiate* education and training in the United States (including the military and non-profit agencies). This cooperative effort should involve other agencies of the Department of Education, the Department of Labor, the Armed Forces Training Command, the National Center for Charitable Statistics, and the American Society for Training and Development. It is estimated that much of the data on this huge and amorphous "second system" of postsecondary education already exists in fragmented form.

3. NIE take the leadership role within the Department of Education in revitalizing the Federal Interagency Commission on Education (FICE). A few years ago, FICE was an organization representing approximately 20 agencies of the federal government—from the military to the National Science Foundation—which had major educational missions and produced descriptive information on the missions and programs that was useful to a wide range of constituencies. We believe that this information should once again be available.

4. A joint research advisory committee involving NIE, the National Center for Education Statistics, and the Office of Postsecondary Education be created to guide research on the subject of transcript analysis. We make this recommendation in light of the "Postsecondary

Transcript" study sponsored by the National Center for Education Statistics, the first phase of which involves the gathering and coding of *college* transcripts from those students in the "High School and Beyond" sample (Class of 1980) who have attended postsecondary institutions. The long-range effort implied by this initial step is an extremely important one since, with the exception of Blackburn's 1976 study of transcripts from a limited sample of colleges and universities, there has been no effort to examine the student experience of the postsecondary curriculum. The National Commission's study of high school transcripts demonstrated how valuable an effort such as this can be, and we believe it essential that research questions be interjected at an early enough stage in the process so that the data encoded will be sufficiently malleable and productive.

5. A systematic and comprehensive approach to the collection of data on adult learners in postsecondary baccalaureate education be implemented. Most of the information currently available about the participation of adults in undergraduate education is fragmented and incomplete because we can collect it principally from full-time students and can ask questions only from the student's perspective. We thus recommend that NIE, NCES, other appropriate agencies in the Department of Education, and other relevant nonfederal research agencies involved in large-scale research and data collection, design and test a procedure that will both reach part-time students and gather information from the perspective of institutions of higher education.

6. NIE convene an annual meeting of the administrators of the Graduate Record Examinations and other examinations normally taken by college graduates to consider how the data generated from these examinations can be analyzed and disseminated more

effectively. They should consider defining a sample control group of test-takers that can be monitored on a yearly basis so as to provide a continuing measure of achievement—at least of those American students who intend to continue their education beyond the baccalaureate level.

We concluded this interim report with a brief summary of the tasks and timetable for our final report.

454-737 O - 84 - 7

Appendix B: List of Commissioned Papers and Staff Analyses

Clifford Adelman National Institute of Education	"The Standardized Test Scores of College Graduates, 1964-1982"
Robert Birnbaum Teachers College, Columbia University	"State Colleges: An Unsettled Quality"
Arthur M. Cohen University of California, Los Angeles	"The Community College in the American Educational System"
Roger Geiger Yale University	"American Research Universities: Their Role in Undergraduate Education"
Allan O. Pfnister University of Denver	"The American Liberal Arts College in the Eighties: Dinosaur or Phoenix?"
David Whetten University of Illinois *and* Kim Cameron NCHEMS	"Characteristics of Effective Organizations"

Appendix C: Acknowledgments

Over the course of our meetings, we have been fortunate to receive the advice and support of a variety of individuals and organizations. We are grateful to each of them and hope they realize that this public acknowledgment can only begin to express how deeply we appreciate their counsel.

In the early meetings of the Study Group, we received guidance from four experienced leaders: Arthur Chickering, Professor and Director of the Center for the Study of Higher Education, Memphis State University; Robert Craig, Vice-President for Governmental and Public Affairs, American Society for Training and Development; Mark Curtis, President, Association of American Colleges; and Morris Keeton, President of the Council for the Advancement of Experiential Learning and Chair of the Commission on the Adult Learner of the American Council on Education.

Five papers commissioned from leading scholars of higher education helped us appreciate the institutional diversity that characterizes American higher education. The authors and titles of their papers are listed in Appendix B of this report. Dr. Peter Ewell of the National Center for Higher Education Management Systems (NCHEMS) wrote a very useful monograph, *Dimensions of Excellence in Postsecondary Education*. Its preparation was made possible by a grant from the W. K. Kellogg Foundation. We wish to thank the Foundation for its support and Dr. Peter Ellis for his encouragement.

The Association for the Study of Higher Education and the American Association for Higher Education provided us with opportunities to discuss our progress and shape some of our ideas at their 1984 conventions. Our numerous friends and colleagues who attended these meetings and who wrote or

phoned us will recognize some of their ideas in this report.

Many of our meetings were observed by representatives of associations and agencies interested in the conditions of excellence in higher education. During social hours and between meetings, many of these observers made useful contributions to our understanding of the issues before us. We are grateful to the John D. and Catherine T. MacArthur Foundation and the William and Flora Hewlett Foundation for providing funds for these occasions. The Claremont Graduate School and Georgetown University served as hospitable hosts for two of our meetings.

The National Institute of Education (NIE) furnished the core funding for our activities, which was administered by NCHEMS. We wish to thank Dr. Manuel Justiz, Director of NIE, and Dr. Ben Lawrence, President of NCHEMS, for creating the group, launching our activities, providing the support of our deliberations, and then for leaving us free to exercise our own judgment.

Dr. Edward Elmendorf, Assistant Secretary of Postsecondary Education, and Dr. Sally Candon of the Office of Postsecondary Education attended our meetings and contributed greatly to both the substance and process of our work. Dr. Norman Francis, President of Xavier University of Louisiana and a member of the National Commission on Excellence in Education (NCEE), provided useful background for our work. Dr. Paul Resta of NIE attended some of our meetings and was helpful in a variety of ways. Dr. Milton Goldberg, Executive Director of NCEE, shared the wisdom gained from the Commission's experiences.

We sought the advice of J. B. Lon Hefferlin of Sacramento, California, about the organization and tone of the report. He was generous with his time, and many of his suggestions are reflected in the report. Laura Kent of the Higher Education Research Institute at U.C.L.A. and Mary Hey of NCHEMS provided excellent editorial support for the final version of the report. Lynn Phillips of NCHEMS and Grant Duncan of Graphic Directions designed the report; Grant also rendered the artwork for the cover. Typesetting of

the report was done by Twila Nosek of Graphic Directions. Clara Roberts of NCHEMS coordinated all aspects of the design and production of the report. We commend all of these individuals for their excellent contributions and for the cooperative spirit they displayed in the face of extremely tight schedules.

We worked closely with four people who became, in the course of the project, friends and colleagues. Paula Dressler of NCHEMS arranged the logistics of our meetings, typed several drafts of the report under great time pressure, and provided other valuable services. Her personal warmth and professional competence made our lives easier. Barbara Hetrick, Professor of Sociology at Hood College, joined us as an American Council on Education Fellow and continued to be a part of our group. Dennis P. Jones was our Project Director at NCHEMS, and Clifford Adelman of NIE served as Project Officer. We deeply appreciate their professional competence and commitment.

Barbara, Dennis, and Cliff shared the excitement and work of preparing our report. Their ideas were incorporated into sections of this document, their energy helped us meet our deadlines, and their many discerning comments enriched our discussions. We are delighted they agreed to work with us.

Appendix D: Biographies Of Study Group Members and Staff

Study Group Members

Alexander W. Astin, a psychologist, is a Professor of Higher Education and Director of the Higher Education Research Institute at U.C.L.A. Previously he was Director of Research for both the American Council on Education and the National Merit Scholarship Corporation. For the past eighteen years he has been Director of the Cooperative Institutional Research Program, a longitudinal study of undergraduates at some 1,000 colleges and universities. Dr. Astin's research has focused on the effects of college environments on student development. Among his recent books are *Minorities in American Higher Education, Four Critical Years,* and *The College Environment.*

J. Herman Blake holds a B.A. from New York University and a Ph.D. from the University of California at Berkeley. He was the Founding Provost of Oakes Colleges, University of California at Santa Cruz, which he headed for twelve years while simultaneously serving on the Sociology faculty. He was recently appointed President of Tougaloo College in Mississippi. His research in higher education has focused on learning environments and their relationship to the success of minority students. In sociology, his research has focused on both urban militants and isolated rural communities.

Howard R. Bowen is an economist. His career has included experience in banking, government, college teaching, and academic administration. In the latter role, he has served as

Dean of the College of Commerce at the University of Illinois and as President of Grinnell College, the University of Iowa, and Claremont University Center. During the past fifteen years he has devoted most of his efforts to the study of higher education and its economic aspects.

Zelda F. Gamson is a sociologist who holds appointments at the Center for the Study of Higher Education, University of Michigan, and the College of Public and Community Service, University of Massachusetts--Boston. She has taught both undergraduate and graduate students, held several administrative positions, and served on many national bodies. Dr. Gamson has written about many topics in higher education. Her most recent publication is *Liberating Education* (San Francisco: Jossey-Bass, 1984).

Harold Hodgkinson is currently a Senior Fellow at the Institute for Educational Leadership, Washington, D.C. He previously served as Director, Professional Institute, American Management Association; President, National Training Laboratories; Director, National Institute of Education; Dean, Bard College; and Dean, School of Education, Simmons College. He is the author of 12 books and 200 articles on such subjects as institutions in transition, college and university governance, and cooperation patterns between public schools, business and industry, and higher education. More recently he has conducted demographic studies related to who will attend college and where.

Barbara A. Lee is Assistant Professor at the Institute of Management and Labor Relations, Rutgers University. She holds a Ph.D. in Higher Education Administration from Ohio State and a J.D. from Georgetown University. Her research and publications focus on the effect of the legal system on the management of educational organizations. Before joining the Rutgers faculty, Dr. Lee was Director of Data Trends Analysis for the Carnegie Foundation for the Advancement of Teaching and a policy analyst for higher education programs at the U.S. Department of Education.

Kenneth P. Mortimer, Chair of the Study Group, is Executive Assistant to the President for University Affairs and a Professor of Higher Education and Public Administration at The Pennsylvania State University. Dr. Mortimer holds degrees in English and Business Administration from the University of Pennsylvania and a Ph.D. in Higher Education from the University of California at Berkeley. He is former Director of the Center for the Study of Higher Education at Penn State. His research interest and published work has centered on questions of governance and management in higher education.

Staff

Clifford Adelman is a Senior Associate at the National Institute of Education. He holds his A.B. (English) from Brown University, and an M.A. (English) and Ph.D. (History of Culture) from the University of Chicago. Prior to joining the NIE staff, he served as Associate Dean and Assistant Vice President for Academic Affairs at the William Paterson College of New Jersey and taught at both the City College of New York and Yale. Dr. Adelman is the author of two books and numerous chapters and articles on literature, language, and higher education.

Barbara Hetrick is Associate Professor of Sociology and Acting Dean of Academic Affairs at Hood College. As Chair of the Department of Sociology and Social Work there, she developed major programs in Sociology, Social Work, and Law and Society. She was the second recipient of the students' Excellence in Teaching Award. She holds degrees in French, Sociology, and Education from Western Maryland College and the University of Maryland, and was an A.C.E. Fellow in Academic Administration in 1983-1984.

Dennis P. Jones is Vice President for Planning and Evaluation at the National Center for Higher Education Management

Systems. He holds degrees in Engineering Management from Rensselaer Polytechnic Institute. Prior to joining NCHEMS in 1969, he was Assistant Vice President for Business at Rensselaer Polytechnic Institute. He is the author of two books and has written extensively on the development of data bases in colleges and universities, information for management decision making, facilities planning, and state-level budget formulas.

Ordering Information

Additional copies of this report may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

The cost of this report is indicated on the enclosed order form. Please send check, money order, or account number for VISA or MasterCard, noting the expiration date on your credit card. Indicate the name and address, including zip code, to which the order should be shipped and provide your telephone number. Also, note the stock number with your order: Stock No. 065-000-00213-2.

Charge orders may be telephoned to the GPO order desk at (202) 783-3238, from 8:00 a.m. to 4:00 p.m. Eastern time, Monday through Friday, except holidays. Inquiries about bulk rates are encouraged.

The report will also be available in the ERIC System after October 1984.

Copies of materials submitted to the ERIC System are available in two forms: paper copy (a reproduction of the document in approximately the original page size) and microfiche (a 4" × 6" sheet of microfilm on which up to 96 pages of text are reproduced). Copy costs are based on the number of pages in the document. To illustrate, a 72-page document currently costs $5.65 in paper copy and $.97 in microfiche with postage costs in addition. Copies can be secured by contacting:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Virginia 22210
(703) 841-1212

CUT HERE

Report Order Form

Mail To: Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Enclosed is $ _____

☐ Check ☐ Money Order, or charge to my Deposit Account No.

Order No. _____ ☐☐☐☐☐☐☐–☐

MasterCard and VISA accepted.

Credit Card Orders Only
Total charges $ _____
Fill in the boxes below

Customer's Telephone No.'s
Area Code Home Area Code Office

Credit Card No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiration Date Month/Year ☐☐☐☐

Charge orders may be telephoned to the GPO order desk at (202) 783-3238 from 8:00 a.m. to 4:00 p.m. eastern time, Monday-Friday (except holidays).

Please send me _____ copies of *Involvement in Learning: Realizing the Potential of American Higher Education*, October 1984; at $4.50 per copy. Stock No. 065-000-00213-2.

Company or Personal Name

Additional address/attention line

Street address

City State ZIP Code

(or Country)

PLEASE PRINT OR TYPE

For Office Use Only

Quantity		Charges		
_____	Publications	_____	_____	UPNS
_____	Subscriptions	_____	_____	Balance Due
	Special Shipping Charges	_____	_____	Discount
	International Handling	_____	_____	Refund
	Special Charges	_____		
	OPNR	_____		